

145 150 155 160
 Thr Phe Ser Leu Phe Cys Met Ser Ser Glu Val His His Phe Phe Cys
 165 170 175
 Glu Val Pro Ala Val Met Ala Leu Ser Cys Ser Asp Arg His Val Asn
 180 185 190
 Val Val Val Leu Val Tyr Val Thr Ser Phe Asn Ile Leu Phe Ala Leu
 195 200 205
 Leu Val Ile Leu Ile Ser Tyr Leu Leu Met Phe Ile Thr Ile Leu Lys
 210 215 220
 Met His Ser Thr Ala Gly Tyr Gln Lys Ala Leu Ala Ile Cys Ala Ser
 225 230 235 240
 His Leu Thr Ala Val Ala Ile Phe Tyr Gly Thr Ile Ile Phe Met His
 245 250 255
 Ile Gln Pro Ser Ser His Ser Ile Asp Thr Asp Lys Ile Ala Ala
 260 265 270
 Val Phe Tyr Thr Ile Val Phe Pro Met Val Asn His Val Val Xaa Arg
 275 280 285
 Leu Lys Asn Lys Val Lys Ser Thr Phe Lys Lys Ile Val Glu Lys Val
 290 295 300
 Lys Leu Ser Leu Gly Leu Xaa Val
 305 310

<210> 2231

<211> 267.

<212> PRT

<213> Homo sapien (8118750-8-1-2827)

<400> 2231

Ile Ile Leu Cys Phe Phe Ile Ile Gly Asn Ser Gln Asp Asn Ser Gln
 1 5 10 15
 Met Thr Leu Met Asp Asn Ile Ser Glu Val Thr Glu Phe Val Leu Val
 20 25 30
 Gly Leu Thr Asp Val Leu Glu Leu Gln Val Pro Leu Phe Ile Ile Phe
 35 40 45
 Thr Val Ile Tyr Leu Thr Thr Leu Val Gly Asn Phe Gly Met Ile Met
 50 55 60
 Leu Ile Leu Leu Asp Ser Arg Leu His Ile Pro Met Tyr Phe Phe Leu
 65 70 75 80
 Gly Lys Leu Ser Leu Val Asp Ser Val Cys Ala Cys Leu Val Thr Gly
 85 90 95
 Ser Tyr Ile Cys Gly Leu Phe Gln Ser Ser Ile His Val Ala Phe Thr
 100 105 110
 Phe His Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe Phe Cys
 115 120 125
 Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Ile Tyr Ala His
 130 135 140
 Glu Ile Val Leu Phe Ile Leu Ala Ala Phe Asn Ile Phe Phe Thr Leu
 145 150 155 160
 Leu Ile Ile Leu Asn Ser Tyr Val Phe Ile Phe Ile Ala Ile Leu Arg
 165 170 175
 Met His Ser Ala Glu Gly Gln Lys Lys Val Phe Ser Thr Cys Ala Tyr
 180 185 190
 His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Thr Phe Met Tyr
 195 200 205
 Leu Gln Pro Ser Ser Gly His Ser Met Asp Thr Asp Lys Ile Ser Ser
 210 215 220
 Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr Ser
 225 230 235 240
 Leu Arg Asn Lys Glu Val Gln Ser Ala Phe Lys Val Val Ile Gly Lys
 245 250 255
 Ala Lys Ser Ser Leu Gly Leu Ala Tyr Tyr Leu

260

265

<210> 2232
 <211> 309
 <212> PRT
 <213> Homo sapien (8118822-9-5564-7217)

<220>
 <221> VARIANT
 <222> (1)...(309)
 <223> Xaa = Any Amino Acid

<400> 2232
 Glu Xaa Met Gly Thr Ser Asn Asn Val Thr Glu Phe Val Leu Pro Gly
 1 5 10 15
 Leu Ser Gln Asp Pro Asp Val Gln Lys Ala Leu Phe Val Met Phe Leu
 20 25 30
 Leu Thr Tyr Asn Val Thr Met Val Gly Asn Leu Leu Ile Val Val Thr
 35 40 45
 Ile Ile Ala Ile Ala Ser Leu Asp Ser Pro Val Ser Phe Phe Leu Ala
 50 55 60
 Cys Leu Ser Phe Ile Asp Ala Val Tyr Ser Thr Ser Phe Ser Pro Lys
 65 70 75 80
 Leu Met Ile Asp Leu Leu Cys Asp Lys Lys Thr Val Ser Phe Leu Ala
 85 90 95
 Cys Met Gly Gln Leu Phe Ile Asn Tyr Pro Phe Gly Gly Ile Glu Val
 100 105 110
 Phe Leu Leu Val Gly Met Ala Cys Asp His Tyr Val Asp Ile Cys Lys
 115 120 125
 Leu Leu His Tyr Leu Thr Ile Met Asn Trp Gln Val Cys Ile Leu Leu
 130 135 140
 Phe Met Val Ala Val Thr Gly Gly Phe Leu His Ser Met Phe Gln Ile
 145 150 155 160
 Val Val Val Tyr Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His
 165 170 175
 Phe Cys Asp Met Tyr Pro Leu Leu Glu Met Val Cys Thr Asp Thr Tyr
 180 185 190
 Phe Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Ala Val Cys Met Val
 195 200 205
 Ile Phe Ile Leu Leu Leu Ile Ser Tyr Gly Val Ile Leu Asn Ser Leu
 210 215 220
 Lys Thr Tyr Ser Gln Glu Gly Gly His Lys Ala Leu Ser Thr Cys Ser
 225 230 235 240
 Ser Asn Ile Thr Val Val Ser Leu Phe Phe Asp Pro Cys Ile Phe Ile
 245 250 255
 Tyr Val Arg Pro Asp Ser Asn Phe Pro Ile Asp Lys Phe Met Thr Val
 260 265 270
 Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu
 275 280 285
 Arg Asn Leu Glu Val Arg Ile Ala Val Lys Asn Leu Trp Cys Lys Asn
 290 295 300
 Xaa Thr Ile Val Arg
 305

<210> 2233
 <211> 257
 <212> PRT
 <213> Homo sapien (8118832-14-2647-3682)

<220>
 <221> VARIANT

<222> (1)...(257)

<223> Xaa = Any Amino Acid

<400> 2233

```

Ser Met Tyr Phe Phe Leu Thr Asn Phe Ala Gly Leu Glu Ile Phe Tyr
1      5      10      15
Phe Phe Thr Ile Ala Pro Leu Thr Leu Ala Asn Val Leu Pro Met Gly
20      25      30
Arg Asn Leu Ile Ser Leu Pro Gly Cys Gly Gly Gln Met Phe Phe Phe
35      40      45
Ile Phe Leu Gly Arg Ala Asp Cys Ile Leu Leu Ala Val Met Ala Phe
50      55      60
Asp Trp Phe Val Ala Ile Cys Cys Pro Leu Cys Tyr Gly Leu Ile Met
65      70      75      80
Ser Trp Arg Leu Cys Val Gln Leu Thr Leu Gly Ser Leu Leu Leu Gly
85      90      95
Phe Phe Leu Ala Met Gln Leu Thr Val Leu Ile Phe Gln Leu Pro Leu
100     105     110
Cys Ser Ser Lys Glu Ile Ser Thr Phe Tyr Cys Asp Val Leu Pro Val
115     120     125
Met Arg Leu Ala Cys Ala Asp Thr Trp Val His Glu Ala Thr Met Ser
130     135     140
Met Val Ser Thr Thr Phe Leu Thr Val Pro Phe Leu Leu Ile Thr Leu
145     150     155     160
Ser Tyr Val Ser Ile Met Ala Ala Ile Leu Lys Ile Cys Ser Ala Glu
165     170     175
Gly Arg His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val
180     185     190
Leu Leu Gln Asp Xaa Cys Thr Arg Leu Ala Phe Leu Cys Pro Ser Ser
195     200     205
Ser Tyr Tyr Pro Glu Arg Gly Gln Ala Val Ser Val Val Tyr Thr Phe
210     215     220
Ile Thr Pro Val Leu Asn Pro Leu Ile Tyr Ser Met Arg Asn Thr Glu
225     230     235     240
Leu Lys Asp Ala Leu Lys Arg Ala Met Thr Arg Val Pro Leu Leu Xaa
245     250     255
Thr

```

<210> 2234

<211> 327

<212> PRT

<213> Homo sapien (8118892-3-16899-18792)

<220>

<221> VARIANT

<222> (1)...(327)

<223> Xaa = Any Amino Acid

<400> 2234

```

Met Glu Gln Arg Lys Asn Val Thr Glu Phe Val Leu Val Gly Leu Thr
1      5      10      15
Gln Ser Pro Gln Gly Gln Lys Ile Leu Phe Leu Val Phe Leu Leu Ile
20      25      30
Tyr Val Val Thr Met Val Gly Asn Ile Phe Ile Val Val Thr Val Val
35      40      45
Val Ser Pro Thr Leu Gly Cys Pro Met Tyr Phe Phe Leu Gly Tyr Leu
50      55      60
Ser Phe Met Asp Ala Val His Ser Thr Thr Val Thr Pro Asn Met Ile
65      70      75      80
Ile Asp Leu Leu Tyr Glu Lys Lys Thr Ile Ser Phe Gln Ala Cys Ile

```

85 90 95
 Thr Gln Ile Phe Ile Gly His Leu Phe Gly Gly Ala Glu Ile Leu Leu
 100 105 110
 Leu Val Val Met Ala Tyr Asp Gly Tyr Val Thr Ile Cys Lys Pro Leu
 115 120 125
 His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu Leu
 130 135 140
 Leu Ala Trp Ala Gly Gly Phe Leu His Ala Val Val Gln Leu Leu Phe
 145 150 155 160
 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
 165 170 175
 Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr Val
 180 185 190
 Thr Gly Leu Thr Val Val Ala Asn Asp Gly Ala Ile Cys Val Val Ile
 195 200 205
 Phe Met Leu Leu Leu Phe Ser Tyr Gly Val Ile Leu His Ser Leu Lys
 210 215 220
 Asn Leu Ser Gln Glu Gly Arg His Lys Ala Leu Ser Thr Cys Gly Ser
 225 230 235 240
 His Ile Thr Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
 245 250 255
 Val Arg Pro Pro Leu Thr Leu Pro Ile Asp Lys Ser Leu Thr Val Phe
 260 265 270
 Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
 275 280 285
 Asn Ala Glu Met Lys Asn Ala Met Lys Lys Leu Trp Thr Arg Lys Arg
 290 295 300
 Lys Xaa Gly Gly Asp Lys Cys Ile Ile Tyr Phe Gln Xaa Arg Val Ala
 305 310 315 320
 Pro Ser Arg Lys Ala Ile Cys
 325

<210> 2235

<211> 125

<212> PRT

<213> Homo sapien (8118970-10-4947-6912)

<400> 2235

Leu Ala Cys Ala Asp Thr Ser Leu Ala Gln Arg Val Ser Phe Pro Asp
 1 5 10 15
 Val Gly Leu Ile Ser Leu Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr
 20 25 30
 Thr Arg Ile Thr Ile Ser Ile Leu Ser Ile Arg Thr Thr Glu Gly Arg
 35 40 45
 Arg Arg Ala Phe Ser Thr Cys Ser Ala His Leu Ile Ala Ile Leu Cys
 50 55 60
 Ala Tyr Gly Pro Ile Ile Thr Val Tyr Leu Gln Pro Thr Pro Asn Pro
 65 70 75 80
 Met Leu Gly Thr Val Val Gln Ile Leu Met Asn Leu Val Gly Pro Met
 85 90 95
 Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Thr Ala
 100 105 110
 Leu Lys Thr Ile Leu His Arg Thr Gly His Val Pro Glu
 115 120 125

<210> 2236

<211> 112

<212> PRT

<213> Homo sapien (8118970-16-561-1769)

<400> 2236

Met Glu Val Lys Asn Cys Cys Met Val Thr Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Ile Pro His Thr Glu Gly Leu Glu Met Thr Leu Phe Val Leu Phe Leu
 20 25 30
 Pro Phe Tyr Ala Cys Thr Leu Leu Gly Asn Val Ser Ile Leu Val Ala
 35 40 45
 Val Met Ser Ser Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
 50 55 60
 Asn Leu Ser Val Phe Asp Met Gly Phe Ser Ser Val Thr Val Pro Lys
 65 70 75 80
 Met Leu Leu Tyr Leu Met Gly Leu Ser Arg Leu Ile Ser Tyr Lys Asp
 85 90 95
 Cys Val Cys Gln Leu Phe Phe Phe His Phe Leu Gly Ser Ile Glu Cys
 100 105 110

<210> 2237

<211> 287

<212> PRT

<213> Homo sapien (8119016-6-4856-7402)

<220>

<221> VARIANT

<222> (1)...(287)

<223> Xaa = Any Amino Acid

<400> 2237

Val Ile Arg Asn Gln Thr Met Val Thr Glu Phe Thr Leu Val Ser Leu
 1 5 10 15
 Pro Ala Val Gln Glu Leu Gln Ile Trp Leu Cys Val Leu Leu Trp Leu
 20 25 30
 Val His Met Leu Thr Ile Thr Gly Asn Leu Phe Val Ile Phe Leu Thr
 35 40 45
 Trp Thr Asp Asn Cys Leu Gln Thr Pro Met Asp Leu Phe Leu Glu Lys
 50 55 60
 Lys Val Ile Ser Phe Ser Gly Cys Ile Thr Gln Ile Tyr Phe Tyr Phe
 65 70 75 80
 Phe Leu Gly Thr Val Ala Phe Ile Pro Leu Ala Val Thr Ser Phe Lys
 85 90 95
 His Cys Met Ala Thr Cys Asp Pro Leu Cys Ser Thr Ile Ile Ala Lys
 100 105 110
 Ser Arg Ala Cys Leu Leu Leu Ala Leu Gly Cys Trp Met Gly Thr Phe
 115 120 125
 Leu Ala Val Leu Arg Leu Thr Ile Val Val Ser Arg Leu Pro Asp Cys
 130 135 140
 Thr Glu Lys Ile Ser Pro Phe Phe Cys Asp Ile Ala Ser Leu Leu Gln
 145 150 155 160
 Val Ala Cys Ile Asp Ile His Phe Ile Glu Met Ile Ser Phe Leu Xaa
 165 170 175
 Ser Ser Leu Met Val Leu Thr Ser Leu Val Leu Asn Ala Thr Ser Tyr
 180 185 190
 Ala Tyr Ile Ile Ser Thr Leu Leu Cys Ile Pro Ser Ala Gln Gly Cys
 195 200 205
 Gln Glu Ala Phe Ser Thr Cys Ala Ser His Ile Thr Ile Ile Phe Ile
 210 215 220
 Ala Cys Arg Asn Ser Ile Ser Thr Cys Val Arg Pro Asn Pro Arg Tyr
 225 230 235 240
 Xaa Leu Asp Phe Asp Lys Val Thr Ala Ile Leu Thr Ile Val Val Thr
 245 250 255
 Ser Phe Leu Asn Pro Arg Ile Tyr Ser Leu Arg Xaa Arg Lys Tyr Glu
 260 265 270
 Gly Ser Xaa Ile Cys Thr Ile Leu Ser Pro His Ser Lys Gly Thr

```
<210> 2239
<211> 228
<212> PRT
<213> Homo sapien (8119057-15-786-3116)
```

```
<220>  
<221> VARIANT  
<222> (1)...(228)  
<223> Xaa = Any Amino Acid
```

```

<400> 2239
Met Leu Ile Pro Ser Ser Thr Arg Lys Met Ala Ala Glu Ser His Ser
 1          5          10          15
Thr Val Thr Glu Phe Ile Leu Arg Lys Lys Pro Ala Arg Ala Pro Ala
 20          25          30
Pro Pro Leu Leu Gly Ile Cys Leu Lys Thr Val Val Gly Ala Leu Ile
 35          40          45
Leu Ile Thr Leu Val Phe Leu Asn Ser Gln Leu His Pro Pro Met Tyr
 50          55          60

```

Tyr Val Ile Arg Asn Leu Ser Phe Met Asp His Cys Asn Cys Ser Ile
 65 70 75 80
 Ser Thr Pro Lys Ile Leu Val Lys Phe Val Leu Glu Lys Thr Ile Ile
 85 90 95
 Ser Tyr Glu Asp Gly Met Ser Gln Leu Cys Ser Ala Ser Cys Tyr Ile
 100 105 110
 Leu Ser Trp Pro Ser Val Thr Cys Gly Pro Ala Thr Ala Val Ile Thr
 115 120 125
 Phe His Gln Val Ser Ser Leu Leu Val Val Val Val Tyr Tyr Met Glu
 130 135 140
 Leu Thr Gly Thr Thr Ile Glu Phe Cys Leu Val Leu Lys Xaa Tyr Xaa
 145 150 155 160
 Cys Glu Leu Phe Ile Ser His Tyr Phe Cys Ser Cys Thr Ser Ile Tyr
 165 170 175
 Asp Ile Asp Arg Thr Ile Phe Phe Phe Thr Xaa Cys Asn Ile Val Val
 180 185 190
 Thr Arg Leu Thr Val Val Ser Tyr Ser Phe Leu Ser Ser Ile Leu His
 195 200 205
 Ile Ser Phe Thr Arg Ala Ala Leu Gly Phe Ser Arg Arg Ser Asp Ala
 210 215 220
 Phe Met Leu Cys
 225

<210> 2240

<211> 277

<212> PRT

<213> Homo sapien (8119057-2-10436-11711)

<220>

<221> VARIANT

<222> (1)...(277)

<223> Xaa = Any Amino Acid

<400> 2240

His Ser Phe Leu Arg Tyr Ile Phe Ala Lys Leu Thr Gly Glu Pro Glu
 1 5 10 15
 Leu Gln Pro Ser Leu Tyr Ser Val Phe Trp Ser Pro Xaa Leu Gly Xaa
 20 25 30
 Pro His His Thr Ser Met Tyr Pro Leu His Thr Ser Met Tyr Leu Tyr
 35 40 45
 Ile Phe Ser Phe Ser Phe Ile Gly Phe Phe Tyr Ser Ser Val Ile Ser
 50 55 60
 Pro Gln Met Thr Ile Ser Phe Val Thr Glu Lys Asn Ile Ile Thr Tyr
 65 70 75 80
 Val Thr Ser Asn Thr Gln Pro Phe Pro Leu Cys Phe Phe Val Ile Ser
 85 90 95
 Asp Tyr Ser Ile Phe Ile Pro Leu Ala Leu Asp His Tyr Glu Ala Met
 100 105 110
 Thr Leu Pro Val Ser Phe Ile Ser Phe Ile Ser Val Asp Gly Ser Xaa
 115 120 125
 Val Ile Glu Phe Ala Asp Ala Val Val His Gln Gly Ser Met Asp Gln
 130 135 140
 Phe Leu Phe Cys Asp His Ser Cys Met Ser Leu Asn Leu Cys Asn Ile
 145 150 155 160
 Gly Pro Leu Gln Ala Ala Xaa Ile Ser Thr Tyr Val Ser Lys Gln Val
 165 170 175
 Asp Leu Tyr Ser Xaa Glu Pro Ala Val Tyr His Ala Val Leu Ser Phe
 180 185 190
 Ser Tyr Phe Val Phe Ile Leu Phe Asn Ile Phe His Xaa Pro Ser Gly
 195 200 205
 Pro Asn Leu Gln Pro Asp Ser Ile Asn Leu Phe Ile Ser Phe Phe Gly

210 215 220
 Leu Gly Thr Phe Met Tyr Leu Arg Ser Pro Glu Ala Met Gly Xaa Cys
 225 230 235 240
 Lys Phe Thr Val Ser Phe Thr Lys Met Gly Pro Val Met Asn Gly Leu
 245 250 255
 Phe Asn Thr Leu Arg Asn Lys Thr Ile Xaa Leu Ala Ala Met Lys Pro
 260 265 270
 Leu Ser Phe Ser Ser
 275

<210> 2241
 <211> 125
 <212> PRT
 <213> Homo sapien (8119057-22-209-1834)

<220>
 <221> VARIANT
 <222> (1)...(125)
 <223> Xaa = Any Amino Acid

<400> 2241
 Ile Leu Ser Ser Ile Leu His Ile Ser Ser Thr Glu Gly Arg Ser Lys
 1 5 10 15
 Ala Phe Ser Thr Cys Ser Ser His Ile Val Val Ser Leu Phe Phe
 20 25 30
 Gly Ser Gly Ala Phe Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro Leu
 35 40 45
 Asp Gln Gly Lys Val Ser Ser Ile Phe Cys Thr Ala Val Val Pro Met
 50 55 60
 Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala
 65 70 75 80
 Leu Arg Arg Thr Phe Cys Arg Lys Leu Val Ser Xaa Lys Xaa Met Arg
 85 90 95
 Lys Gly Ile Gln Thr Phe Val Asn Gln Gly Val Ser Phe Leu Phe Phe
 100 105 110
 Ser Glu Gly Thr Asn Ala Thr Ala Phe Ser Pro Ile Leu
 115 120 125

<210> 2242
 <211> 164
 <212> PRT
 <213> Homo sapien (8119071-15-1-1473)

<220>
 <221> VARIANT
 <222> (1)...(164)
 <223> Xaa = Any Amino Acid

<400> 2242
 Trp Lys Asn His Phe Thr Ser Val Asn Cys Gly Phe Ala Ile Cys Arg
 1 5 10 15
 Ala Glu Cys Xaa Pro Xaa Pro Lys Ile Leu Ser Ile Ile Gly Leu Lys
 20 25 30
 Xaa Asn Ile Asn Glu Thr Leu Xaa Met Leu Asn Tyr Asn Thr Asn His
 35 40 45
 Met Val Ser Val Asp Val Leu Ile Val Pro Asn Ser Leu Ile Thr Leu
 50 55 60
 Ser Tyr Phe Phe Ile Val Ala Ala Ile Leu His Ile Arg Ser Ala Glu
 65 70 75 80
 Gly Arg His Lys Ala Phe Pro Thr Cys Ser Phe His Leu Val Val Ile
 85 90 95

Leu Leu Gln His Asn Ala Thr Ser Leu Thr Tyr Leu Cys Pro Ser Ser
 100 105 110
 Ile Phe Ser Tyr Glu Arg Gly Lys Val Val Ser Thr Val Tyr Thr Cys
 115 120 125
 Ile Thr Pro Val Pro Asn Pro Leu Ile Cys Ser Met Arg Lys Lys Glu
 130 135 140
 Leu Lys His Ala Leu Lys Lys Lys Glu Glu Ile Ala Arg Phe Leu Leu
 145 150 155 160
 Leu Arg Thr His

<210> 2243
 <211> 131
 <212> PRT
 <213> Homo sapien (8131609-2-31657-32554)

<220>
 <221> VARIANT
 <222> (1)...(131)
 <223> Xaa = Any Amino Acid

<400> 2243
 Ile Ile Tyr Leu Leu Cys Xaa Asp Pro Ala Ile Cys Glu Ser Val Ile
 1 5 10 15
 Phe Phe Pro Met Gly Phe Ser Asp Cys Leu Pro Ile Leu Ser Ile Met
 20 25 30
 Ile Thr Tyr Leu Phe Thr Phe Ile Asp Leu Leu Ile Pro Leu Pro His
 35 40 45
 Val Xaa Leu Gln Lys Asp Tyr Tyr Val Cys Ala Ser Asn Leu Thr Val
 50 55 60
 Val Ser Thr Phe Ser Xaa Asp His Leu Phe Ser Cys Leu His Ser Ser
 65 70 75 80
 Asp Ala Ala Leu Leu Trp Thr Gln Thr Lys Leu His Ser Tyr Phe Ala
 85 90 95
 Ile Val Ile Pro Thr Leu Tyr Pro Leu Val His Ser Leu Lys Asn Arg
 100 105 110
 Gly Gly Gln Ser Ala Leu Arg Lys Val Leu Val Lys Ala Lys Ser Gln
 115 120 125
 Leu Ser Leu
 130

<210> 2244
 <211> 312
 <212> PRT
 <213> Homo sapien (8131609-3-27134-29103)

<220>
 <221> VARIANT
 <222> (1)...(312)
 <223> Xaa = Any Amino Acid

<400> 2244
 Thr Thr Ser Ile Asp Asp Asn Thr Glu Val Asn Glu Phe Ile Xaa Leu
 1 5 10 15
 Gly Leu Thr Lys Ala Pro Glu Leu Gln Val His Leu Phe Val Leu Phe
 20 25 30
 Asn Phe Ile Tyr Leu Phe Thr Leu Ser Gly Asn Leu Gly Met Met Leu
 35 40 45
 Leu Ile Leu Leu Asp Ser Arg Leu His Thr Ser Met Tyr Phe Phe Leu
 50 55 60
 Ser Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Glu Thr Val Thr Pro

```

65          70          75          80
Lys Met Met Ala Gly Leu Leu Ile Ala His Lys Val Ile Ser Tyr Asn
85          90          95
Val Cys Ala Ala Gln Met Phe Phe Phe Ala Val Phe Ala Thr Val Glu
100         105         110
Ser Tyr Phe Leu Thr Ser Val Ala Tyr Asp Cys Tyr Arg Val Met Cys
115         120         125
Lys Pro Leu His Tyr Thr Thr Thr Met Thr Thr Asn Val Cys Ala Ser
130         135         140
Leu Ala Ile Ala Cys Tyr Val Leu Gly Leu Leu Thr Ala Ala Val Asp
145         150         155         160
Ile Gly Asp Ile Cys Met Ser Asn Glu Ile His His Phe Phe Cys Asp
165         170         175
Ile Leu Ala Val Met Thr Leu Thr Cys Ser Asn Lys His Ile Asn Glu
180         185         190
Leu Ile Leu Val Leu Leu Gln Ala Ile Phe Phe Thr Leu Leu Val Ile
195         200         205
Leu Ile Ser Cys Leu Phe Val Phe Val Phe Val Thr Ile Leu Lys Met
210         215         220
His Leu Phe Lys Ser Tyr Lys Lys Val Leu Ser Thr Tyr Gly Ser His
225         230         235         240
Leu Thr Ala Val Pro Leu Phe Tyr Glu Thr Val Leu Ile Thr Tyr Val
245         250         255
Gln Pro Ser Ser Ser His Phe Met Asn Thr Glu Lys Ile Val Ser Val
260         265         270
Phe His Ile Met Val Ile Pro Met Leu Ile Pro Val Val Tyr Ser Leu
275         280         285
Arg Asn Asn Glu Val Lys Ser Ala Phe Lys Thr Val Val Glu Glu Thr
290         295         300
Lys Tyr Phe Leu Gly Leu Val Phe
305         310

```

<210> 2245

<211> 189

<212> PRT

<213> Homo sapien (8131615-11-1-272)

<220>

<221> VARIANT

<222> (1)...(189)

<223> Xaa = Any Amino Acid

<400> 2245

```

Ala Thr Lys Glu Leu Cys Phe Leu Gly Val Tyr Ile Pro Lys Gly Asp
1          5          10          15
Ala Cys Trp Lys Xaa Leu Xaa Leu Gly Leu His Leu Leu Leu Gly
20         25         30
Xaa Gln Val Val Ser Met Val Gly Asn Leu Ala Leu Ile Ala Leu Ile
35         40         45
Gly Xaa Asn Ser Tyr Leu His His Pro Gln Ala Leu Phe Ser Phe Thr
50         55         60
Gln Ser Phe Pro Asp Leu Tyr Cys Pro Val Cys Thr Pro Arg Met Leu
65         70         75         80
Met Thr Phe Val Ser Lys Lys Asn Ile Phe Tyr Val Arg Cys Met Thr
85         90         95
Gln Leu Ser Gln Leu Phe Phe Leu Phe Ile Val Leu Ser Ile Lys Tyr
100        105        110
His Val Leu Met Phe Ile Ala Cys Gly Cys Leu Val Ala Ile Tyr Asn
115        120        125
Pro Ser Leu His Glu Val Thr Met Ser Pro Gln Val Arg Glu Met Arg
130        135        140

```

Glu Ser Gly Phe Ala Gly Thr Thr Ala His Thr Gly His Ile Leu Arg
 145 150 155 160
 Pro Asn Leu Cys Asn Ile Asp Val Ile Asn His His Leu Thr Asp Ser
 165 170 175
 Leu Leu Val Leu Xaa Val Ser Cys Thr Ser Thr Cys Ala
 180 185

<210> 2246
 <211> 207
 <212> PRT
 <213> Homo sapien (8131622-1-12991-13959)

<220>
 <221> VARIANT
 <222> (1)...(207)
 <223> Xaa = Any Amino Acid

<400> 2246
 Glu Ile Ile Leu Ile Gly Ile Ser Leu Lys Leu Tyr Leu Val Val Phe
 1 5 10 15
 Thr Ile Ile Lys Ile Lys Xaa His Ser Ile Gly Leu Ser Ser Asn Lys
 20 25 30
 Asn Met Arg Leu Pro Ser Asp Phe Leu Ser Gln Ala Ile Tyr Tyr
 35 40 45
 Xaa Trp Ala Leu Met Cys Val Leu Glu Asn Lys Thr Tyr Ala Ser Val
 50 55 60
 Arg Leu Val Xaa Arg Phe Gly Trp Xaa Lys Leu Ala Asn Xaa Met Ser
 65 70 75 80
 Val Leu Tyr Leu Glu Ala Asn Leu Gly Asn Met Asp Asn Ala Leu Leu
 85 90 95
 Lys Xaa Leu Lys Arg Asn Tyr Phe Val Phe Val Phe Thr Ser Phe Leu
 100 105 110
 Phe Gly Cys Ile Ala Phe Lys Xaa Lys Glu Ile Phe Tyr Pro Tyr Thr
 115 120 125
 Ser Ile Cys Ile Tyr His Leu Met Met Glu Arg Lys Val Ser Cys
 130 135 140
 Leu Thr Leu Ile Cys Leu Ala Xaa Asp Leu Xaa His Phe Xaa Cys Ser
 145 150 155 160
 Leu Val Thr Val Leu Ser Leu Glu Cys Xaa Gln Leu Asp Ile Cys Asn
 165 170 175
 Val Val Thr Tyr Phe Asn Thr Met Val Xaa Ser Thr Thr Gly Ser Asn
 180 185 190
 Ser Xaa Thr Pro Asn His Ser Val Leu Ile Cys Asn Met Leu Lys
 195 200 205

<210> 2247
 <211> 311
 <212> PRT
 <213> Homo sapien (8131622-11-1950-4442)

<400> 2247
 Met Thr Gly Gly Gly Asn Ile Thr Glu Ile Thr Tyr Phe Ile Leu Leu
 1 5 10 15
 Gly Phe Ser Asp Phe Pro Arg Ile Ile Lys Val Leu Phe Thr Ile Phe
 20 25 30
 Leu Val Ile Tyr Ile Thr Ser Leu Ala Trp Asn Leu Ser Leu Ile Val
 35 40 45
 Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
 50 55 60
 Ser Asn Leu Ser Phe Ile Asp Val Cys Tyr Ile Ser Ser Thr Val Pro
 65 70 75 80

Lys Met Leu Ser Asn Leu Leu Gln Glu Gln Gln Thr Ile Thr Phe Val
 85 90 95
 Gly Cys Ile Ile Gln Tyr Phe Ile Phe Ser Thr Met Gly Leu Ser Glu
 100 105 110
 Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
 115 120 125
 Asn Pro Leu Leu Tyr Ser Ser Ile Met Ser Pro Thr Leu Cys Val Trp
 130 135 140
 Met Val Leu Gly Ala Tyr Met Thr Gly Leu Thr Ala Ser Leu Phe Gln
 145 150 155 160
 Ile Gly Ala Leu Leu Gln Leu His Phe Cys Gly Ser Asn Val Ile Arg
 165 170 175
 His Phe Phe Cys Asp Met Pro Gln Leu Leu Ile Leu Ser Cys Thr Asp
 180 185 190
 Thr Phe Phe Val Gln Val Met Thr Ala Ile Leu Thr Met Phe Phe Gly
 195 200 205
 Ile Ala Ser Ala Leu Val Ile Met Ile Ser Tyr Gly Tyr Ile Gly Ile
 210 215 220
 Ser Ile Met Lys Ile Thr Ser Ala Lys Gly Ser Pro Lys Ala Phe Asn
 225 230 235 240
 Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Thr Ser Gly
 245 250 255
 Ile Phe Val Tyr Leu Arg Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
 260 265 270
 Arg Phe Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
 275 280 285
 Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Leu Lys Arg
 290 295 300
 Leu Gln Lys Arg Lys Cys Cys
 305 310

<210> 2248

<211> 444

<212> PRT

<213> Homo sapien (8131622-13-5638-8129)

<220>

<221> VARIANT

<222> (1)...(444)

<223> Xaa = Any Amino Acid

<400> 2248

Met Thr Val Glu Arg Ser Ser Met Thr Ile Thr Lys Phe Ile Leu Leu
 1 5 10 15
 Gly Phe Ser Glu Tyr Ser Lys Thr Thr Ile Phe Leu Phe Ser Val Phe
 20 25 30
 Leu Gly Ile Tyr Leu Leu Thr Met Ser Xaa Asn Val Ser Leu Ile Ala
 35 40 45
 Leu Ile Arg Thr Asp Ser His Leu His Ala Pro Val Tyr Phe Phe Leu
 50 55 60
 Ser Asn Pro Ser Phe Leu Asp Ile Cys Cys Val Ser Thr Ile Ala Pro
 65 70 75 80
 Lys Met Pro Ser Asp Phe Phe Lys Lys His Lys Phe Ile Ser Phe Met
 85 90 95
 Gly Cys Thr Met Gln Tyr Phe Ser Ser Leu Asn Val Thr Glu Cys Cys
 100 105 110
 Leu Leu Thr Ala Met Ala Tyr Asp Xaa Tyr Ala Ala Ile Cys Asp Pro
 115 120 125
 Leu Leu Tyr Thr Ala Ile Met Ser Pro Ala Leu Cys Met Pro Met Val
 130 135 140
 Ala Gly Ser Cys Thr Thr Gly Tyr Phe Val Ser Phe Ile Gln Leu Cys

145 150 155 160
 Ala Leu Leu Leu Leu His Phe Cys Glu Ser Asn Ser Ser His Phe Phe
 165 170 175
 Cys Asp Leu Pro Gln Leu Leu Ile Leu Ser Cys Ser His Thr Val Phe
 180 185 190
 Phe Phe Ser Ser His Asp His Tyr Ala His Ser Asn Leu Tyr Thr His
 195 200 205
 Leu Tyr Leu Gly Tyr His Asp Asn Leu Trp Leu Tyr His Cys Gln His
 210 215 220
 Ser Ser Leu Leu Trp Asp Ala Pro Cys Asn Thr Ser Ser Leu Ala Trp
 225 230 235 240
 Val Xaa Leu Ser Ala Val Phe Trp Lys Leu Trp Leu Ile Ile Asp Met
 245 250 255
 Leu Pro Phe Val Thr Leu Cys Ser Thr Trp Pro Ser Met Ser Pro Thr
 260 265 270
 Ser Val Cys Thr Xaa Trp Leu Glu Pro Val Xaa Leu Leu Ser Leu Ala
 275 280 285
 His Leu Ser Asn Tyr Val Leu Cys Phe Ser Ser Ile Ser Val Gly Gln
 290 295 300
 Ile Val Asn His Phe Phe Cys Asp Leu Pro Gln Leu Leu Ile Leu Ser
 305 310 315 320
 Cys Tyr Asp Thr Phe Phe Cys Gln Val Met Thr Ser Met Leu Thr Val
 325 330 335
 Val Phe Gly Leu Thr Ser Val Leu Val Ile Met Ile Phe Tyr Gly Tyr
 340 345 350
 Val Ile Ala Thr Ile Leu Lys Ile Ile Ser Val Glu Gly Arg Ser Lys
 355 360 365
 Val Phe Asn Thr Gly Gly Ser His Leu Ile Ala Val Thr Leu Phe Tyr
 370 375 380
 Cys Ser Arg Ile Phe Val Tyr Met Cys Ser His Ser Asp Ala Ser Leu
 385 390 395 400
 Ser Arg Asn Lys Val Asp Ser Ile Val Tyr Thr Val Val Ile Pro Arg
 405 410 415
 Leu Asn Pro Leu Ile Tyr Ser Leu Ser Asp Lys Xaa Ile Lys Asp Ala
 420 425 430
 Leu Lys Arg Trp Thr Lys Arg Ile Phe Ser Trp Pro
 435 440

<210> 2249

<211> 312

<212> PRT

<213> Homo sapien (8131671-12-1836-3192)

<400> 2249

Met Gly Val Lys Asn His Ser Thr Val Thr Glu Phe Leu Leu Ser Gly
 1 5 10 15
 Leu Thr Glu Gln Ala Glu Leu Gln Leu Pro Leu Phe Cys Leu Phe Leu
 20 25 30
 Gly Ile Tyr Thr Val Thr Val Val Gly Asn Leu Ser Met Ile Ser Ile
 35 40 45
 Ile Arg Leu Asn Arg Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
 50 55 60
 Ser Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys
 65 70 75 80
 Met Leu Ser Gly Phe Leu Cys Arg Asp Arg Ser Ile Ser Tyr Ser Gly
 85 90 95
 Cys Met Ile Gln Leu Phe Phe Phe Cys Val Cys Val Ile Ser Glu Cys
 100 105 110
 Tyr Met Leu Ala Ala Met Ala Cys Asp Arg Tyr Val Ala Ile Cys Ser
 115 120 125
 Pro Leu Leu Tyr Arg Val Ile Met Ser Pro Arg Val Cys Ser Leu Leu

| | | |
|---|-----|-----|
| 130 | 135 | 140 |
| Val Ala Ala Val Phe Ser Val Gly Phe Thr Asp Ala Val Ile His Gly | | |
| 145 | 150 | 155 |
| Gly Cys Ile Leu Arg Leu Ser Phe Cys Gly Ser Asn Ile Ile Lys His | | 160 |
| | 165 | 170 |
| Tyr Phe Cys Asp Ile Val Pro Leu Ile Lys Leu Ser Cys Ser Ser Thr | | 175 |
| | 180 | 185 |
| Tyr Ile Asp Glu Leu Leu Ile Phe Val Ile Gly Gly Phe Asn Met Val | | 190 |
| | 195 | 200 |
| Ala Thr Ser Leu Thr Ile Ile Ser Tyr Ala Phe Ile Leu Thr Ser | | 205 |
| | 210 | 215 |
| Ile Leu Arg Ile His Ser Lys Lys Gly Arg Cys Lys Ala Phe Ser Thr | | 220 |
| 225 | 230 | 235 |
| Cys Ser Ser His Leu Thr Ala Val Leu Met Phe Tyr Gly Ser Leu Met | | 240 |
| | 245 | 250 |
| Ser Met Tyr Leu Lys Pro Ala Ser Ser Ser Ser Leu Thr Gln Glu Lys | | 255 |
| | 260 | 265 |
| Val Ser Ser Val Phe Tyr Thr Thr Val Ile Leu Met Leu Asn Pro Leu | | 270 |
| | 275 | 280 |
| Ile Tyr Ser Leu Arg Asn Asn Glu Val Arg Asn Ala Leu Met Lys Leu | | 285 |
| | 290 | 295 |
| Leu Arg Arg Lys Ile Ser Leu Ser | | 300 |
| 305 | 310 | |

<210> 2250

<211> 305

<212> PRT

<213> Homo sapien (8131682-2-1-1878)

<400> 2250

| | | |
|---|-----|-----|
| Met Gln Arg Ser Asn His Thr Val Thr Glu Phe Ile Leu Leu Gly Phe | | |
| 1 | 5 | 10 |
| Thr Thr Asp Pro Gly Met Gln Leu Gly Leu Phe Val Val Phe Leu Gly | | 15 |
| | 20 | 25 |
| Val Tyr Ser Leu Thr Val Val Gly Asn Ser Thr Leu Ile Val Leu Ile | | 30 |
| | 35 | 40 |
| Cys Asn Asp Ser Cys Leu His Thr Pro Met Tyr Phe Val Val Gly Asn | | 45 |
| | 50 | 55 |
| Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Thr Pro Lys Ile | | 60 |
| 65 | 70 | 75 |
| Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys | | 80 |
| | 85 | 90 |
| Leu Cys Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys Tyr | | 95 |
| | 100 | 105 |
| Leu Leu Ala Ala Val Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro | | 110 |
| | 115 | 120 |
| Leu Leu Tyr Ala Gln Ala Met Ser Ile Lys Leu Cys Ala Leu Leu Val | | 125 |
| | 130 | 135 |
| Ala Val Ser Tyr Cys Gly Gly Phe Ile Asn Ser Ser Ile Ile Thr Lys | | 140 |
| 145 | 150 | 155 |
| Lys Thr Phe Ser Phe Asn Phe Cys Arg Glu Asn Ile Ile Asp Asp Phe | | 160 |
| | 165 | 170 |
| Phe Cys Asp Leu Leu Pro Leu Val Glu Leu Ala Cys Gly Glu Lys Gly | | 175 |
| | 180 | 185 |
| Gly Tyr Lys Ile Met Met Tyr Phe Leu Leu Ala Ser Asn Val Ile Cys | | 190 |
| | 195 | 200 |
| Pro Ala Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Thr Ser Val | | 205 |
| | 210 | 215 |
| Leu Arg Ile Ser Ser Ser Lys Gly Tyr Leu Lys Ala Phe Ser Thr Cys | | 220 |
| 225 | 230 | 235 |
| Ser Ser His Leu Thr Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr | | 240 |

245 250 255
 Ile Tyr Ala Leu Pro Arg Ser Ser Tyr Ser Phe Asp Met Asp Lys Ile
 260 265 270
 Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Leu Met Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Leu Leu
 290 295 300
 Pro
 305

<210> 2251

<211> 306

<212> PRT

<213> Homo sapien (8131682-3-415-2331)

<400> 2251

Met Gln Arg Ser Asn His Thr Val Thr Glu Phe Ile Leu Leu Gly Phe
 1 5 10 15
 Thr Thr Asp Pro Gly Met Gln Leu Gly Leu Phe Val Val Phe Leu Gly
 20 25 30
 Val Tyr Cys Leu Thr Val Val Gly Ser Ser Thr Leu Ile Val Leu Ile
 35 40 45
 Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Val Ile Gly Asn
 50 55 60
 Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val His Thr Pro Lys Ile
 65 70 75 80
 Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
 85 90 95
 Leu Cys Gln Phe Phe Ser Ala Arg Leu Ala Tyr Ser Glu Cys Tyr Leu
 100 105 110
 Leu Ala Ala Met Ala Tyr Asp His Tyr Val Ala Ile Ser Lys Pro Leu
 115 120 125
 Leu Tyr Ala Gln Thr Met Pro Arg Arg Leu Cys Ile Cys Leu Val Leu
 130 135 140
 Tyr Ser Tyr Thr Gly Gly Phe Val Asn Ala Ile Ile Leu Thr Ser Asn
 145 150 155 160
 Thr Phe Thr Leu Asp Phe Cys Gly Asp Asn Val Ile Asp Asp Phe Phe
 165 170 175
 Cys Asp Val Pro Pro Leu Val Lys Leu Ala Cys Ser Val Arg Glu Ser
 180 185 190
 Tyr Gln Ala Val Leu His Phe Leu Leu Ala Ser Asn Val Ile Ser Pro
 195 200 205
 Thr Val Leu Ile Leu Ala Ser Tyr Leu Ser Ile Ile Thr Thr Ile Leu
 210 215 220
 Arg Ile His Ser Thr Gln Gly Arg Ile Lys Val Phe Ser Thr Cys Ser
 225 230 235 240
 Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr Asn
 245 250 255
 Tyr Ser Arg Pro Ser Ser Ser Tyr Ser Leu Lys Arg Asp Lys Met Val
 260 265 270
 Ser Thr Phe Tyr Thr Met Leu Phe Pro Met Leu Asn Pro Met Ile Tyr
 275 280 285
 Ser Leu Arg Ser Lys Asp Met Lys Asp Ala Leu Lys Lys Phe Phe Lys
 290 295 300
 Ser Ala
 305

<210> 2252

<211> 324

<212> PRT

<213> Homo sapien (8152118-1-59952-61847)

<220>
 <221> VARIANT
 <222> (1)...(324)
 <223> Xaa = Any Amino Acid

<400> 2252
 His Thr Glu Pro Arg Asn Leu Thr Gly Val Xaa Glu Phe Leu Leu Leu
 1 5 10 15
 Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Leu Leu Ser
 20 25 30
 Leu Ser Leu Ser Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser
 35 40 45
 Ile Leu Ala Val Arg Ser Glu Ser Pro Leu His Thr Thr Met Tyr Phe
 50 55 60
 Phe Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr
 65 70 75 80
 Val Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser Lys Val Ile Ser
 85 90 95
 His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys
 100 105 110
 Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Gly
 115 120 125
 Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys
 130 135 140
 Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
 145 150 155 160
 Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu
 165 170 175
 Ile Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu Lys Leu Ala Cys
 180 185 190
 Ser Asp Ser Val Ile Asn Ser Ile Phe Ile Tyr Phe Gly Ser Thr Met
 195 200 205
 Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile
 210 215 220
 Val Pro Ser Ile Leu Arg Ile Ser Ser Ser Asp Gly Lys Tyr Lys Ala
 225 230 235 240
 Phe Ser Thr Tyr Gly Ser His Leu Ala Val Phe Cys Xaa Phe Asp Gly
 245 250 255
 Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Val Ala Pro Pro Pro Arg
 260 265 270
 Asn Gly Val Val Val Ser Val Lys Xaa Ala Val Val Thr Pro Met Pro
 275 280 285
 Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu
 290 295 300
 Arg Arg Leu Pro Asn Lys Thr Val Glu Ser Pro Xaa Ser Val Pro Ser
 305 310 315 320
 Phe Phe Trp Cys

<210> 2253
 <211> 212
 <212> PRT
 <213> Homo sapien (8247820-10-10207-11695)

<220>
 <221> VARIANT
 <222> (1)...(212)
 <223> Xaa = Any Amino Acid

<400> 2253

```

Thr Met Phe Tyr Lys Ile Ser Ala Leu Phe Xaa Cys Xaa Cys Ile Thr
 1          5          10          15
Leu Phe Xaa Xaa Lys Leu Ser Lys Gln Lys Ile Tyr Trp Val Leu Thr
 20          25          30
Ile Phe Gly Phe Leu Glu Ala Phe Ile Ala Met Asn Lys Leu Xaa Lys
 35          40          45
Leu Tyr Ser Ser Leu Ile Cys Leu Tyr Phe Ile Ile Xaa Ile Phe Lys
 50          55          60
Phe Ser Asn Met Phe Ile Phe Tyr Asn Met Asn Ile Ser Val His Tyr
 65          70          75          80
Phe Leu Lys Cys Ile Phe Phe Phe Cys Ile Cys Cys Leu Xaa Leu Leu
 85          90          95
Ile Phe Asp Ser Phe Ser Thr His Pro Pro Leu Pro Leu Leu Xaa Glu
 100          105          110
Ala Asp Ile Cys Ala Asn Ser Xaa Pro Cys Tyr Thr Asn Thr Thr Ala
 115          120          125
Ser Xaa Xaa His Phe Tyr Ile Ile Leu Asn Phe Cys Leu Ser Tyr Xaa
 130          135          140
Pro Ser Val Ser Ser Met Leu Tyr Gly Arg Leu Phe Leu Met Tyr Leu
 145          150          155          160
Met Pro Glu Asn Ser Leu Asp Thr Asp Arg Met Ala Ser Val Phe Tyr
 165          170          175
Thr Val Val Ile Pro Met Leu Asn Pro Leu Ile Trp Ser Pro Arg Asn
 180          185          190
Lys Asp Val Thr Ser Ala Leu Arg Lys Val Met Val Asn Arg Lys Gln
 195          200          205
Ala Leu Phe Cys
 210

```

<210> 2254
 <211> 314
 <212> PRT
 <213> Homo sapien (8247820-11-34143-40656)

<220>
 <221> VARIANT
 <222> (1)...(314)
 <223> Xaa = Any Amino Acid

```

<400> 2254
Ile Xaa Met Ala Asp Arg Asn Val Thr Val Ile Thr Glu Phe Ile Leu
 1          5          10          15
Leu Gly Leu Thr Asp Asn Pro Glu Met Asn Val Val Leu Ser Val Leu
 20          25          30
Phe Leu Leu Ile Tyr Leu Ile Thr Val Leu Gly Asn Phe Trp Ile Ile
 35          40          45
Ile Ile Ile Leu Ala Ser Ala Gln Leu His Ser Pro Met Tyr Phe Phe
 50          55          60
Leu Ser Gln Leu Ala Phe Leu Asp Phe Cys Tyr Ser Ser Val Leu Ile
 65          70          75          80
Pro Lys Met Leu Val Asn Tyr Ile Ala Gly Gln Lys Val Ile Ser Tyr
 85          90          95
His Gly Cys Leu Leu Gln Tyr Ser Phe Val Ser Leu Phe Leu Thr Thr
 100          105          110
Glu Cys Phe Leu Leu Ala Ala Met Ala Cys Asp Arg Tyr Leu Ala Val
 115          120          125
Cys His Pro Leu His Tyr Lys Gly Leu Met Thr Pro Thr Phe Xaa Ile
 130          135          140
Tyr Leu Val Thr Val Ser Tyr Leu Leu Gly Ser Val Asn Ser Leu Thr
 145          150          155          160
His Leu Ser Ser Leu Leu Ser Leu Ser Phe Cys Gly Ser Asn Val Ile

```

```

      165      170      175
Asn Arg Tyr Phe Cys Asp Ile Pro Leu Leu Phe Gln Leu Ser Cys Ser
      180      185      190
Asn Thr Gln His Ser Lys Ile Leu Phe Thr Val Leu Ser Gly Ala Thr
      195      200      205
Ser Val Thr Thr Phe Leu Ile Val Val Ser Ser Tyr Leu Val Ile Leu
      210      215      220
Leu Ile Val Leu Lys Ile His Ser Thr Arg Gly Arg Asn Lys Ala Ile
      225      230      235      240
Ser Thr Cys Ala Ser His Leu Met Val Val Thr Leu Phe Tyr Arg Thr
      245      250      255
Val Ile Phe Thr Tyr Leu Gly Ala Asn Pro Gly Tyr Ser Gln Asp Arg
      260      265      270
Pro Lys Ile Leu Pro Val Glu Cys Thr Leu Leu Leu Ser Ile Leu Asn
      275      280      285
Leu Leu Ile Tyr Ser Val Arg Asn Arg Glu Val Lys Glu Ala Ile Lys
      290      295      300
Ile Ile Ile Lys Arg Lys Ile Leu Pro Gln
      305      310

```

<210> 2255

<211> 245

<212> PRT

<213> Homo sapien (8247820-7-4578-5918)

<220>

<221> VARIANT

<222> (1)...(245)

<223> Xaa = Any Amino Acid

<400> 2255

```

Met Ser Xaa Xaa Ile Phe Cys Leu Pro Lys Ile Ile Ile Thr Leu Leu
  1      5      10      15
Gln Xaa Glu Trp Asp Ala Leu Asn Leu Glu Thr Arg Val Phe Leu Glu
      20      25      30
Glu Asp Phe Pro Cys Gly Phe Ser Leu Trp Ile Val Arg Gln Leu Ser
      35      40      45
Phe Phe Leu Glu Ile Asn Xaa Phe Ala His Leu Lys Lys Xaa Cys Arg
      50      55      60
Lys His Thr Ser Thr Phe Ser Leu Ser Asn Leu Ala Phe Xaa Asp Phe
      65      70      75      80
Cys Tyr Ala Ser Val Ile Thr Ser Lys Met Phe Gly Ser Phe Leu Tyr
      85      90      95
Lys Gln Lys Lys Leu Thr Phe Asn Ala Leu Gly Cys Ser Leu Thr Phe
      100      105      110
Met Thr Thr Glu Cys Leu Leu Leu Ala Phe Met Ala Cys Asp Gln Tyr
      115      120      125
Leu Val Ile Cys Asn Pro Pro Leu Tyr Met Val Thr Met Ser Pro Pro
      130      135      140
Gln Gly Val Cys Ile Gln Leu Met Pro Ala Ser Tyr Ser Tyr Ser Phe
      145      150      155      160
Leu Met Thr Leu Ser His Tyr Leu Ser Ala Phe Arg Leu Pro Tyr Cys
      165      170      175
Pro Ser Val Ser Leu Met Phe Asn Gly Ser Leu Phe Leu Tyr Cys Thr
      180      185      190
Xaa Cys Ser Glu Asn Ser Leu Asp Thr Asp Arg Met Ala Ser Val Phe
      195      200      205
Tyr Thr Val Val Ile Pro Met Leu Ser Pro Leu Ile Trp Ser Leu Arg
      210      215      220
Asn Lys Asp Val Lys Asp Ala Leu Arg Lys Val Ile Val Asn Arg Asn
      225      230      235      240

```

Gln Ala Leu Phe Cys
245

<210> 2256

<211> 302

<212> PRT

<213> Homo sapien (8308370-1-1-2758)

<220>

<221> VARIANT

<222> (1)...(302)

<223> Xaa = Any Amino Acid

<400> 2256

```

Ile Arg Glu Thr His Ser His Val Pro Tyr Thr Ser Val Phe Leu Pro
 1           5           10           15
Val Phe Tyr Thr Ala Val Phe Leu Thr Gly Val Leu Gly Asn Leu Val
          20           25           30
Leu Met Gly Ala Leu His Phe Lys Pro Gly Ser Arg Arg Leu Ile Asp
          35           40           45
Ile Phe Ile Ile Asn Leu Ala Ala Ser Asp Phe Ile Val Ser Cys His
          50           55           60
Ile Ala Ser Leu Gly Gly Xaa Arg Thr Ser Leu Gly Leu Trp Arg Thr
65          70          75          80
Gly Ser Phe Leu Cys Lys Gly Ser Ser Tyr Met Ile Ser Val Asn Met
          85          90          95
His Cys Ser Val Leu Leu Leu Thr Cys Met Ser Val Asp Arg Tyr Leu
          100         105         110
Ala Ile Val Trp Pro Val Val Ser Arg Lys Phe Arg Arg Thr Asp Cys
          115         120         125
Ala Tyr Val Val Cys Ala Ser Ile Trp Phe Asn Leu Leu Pro Ala Gly
          130         135         140
Val Ala Tyr Ser Ser Val Gln Gly Ala His Ala Val Asp Asp Lys Pro
145         150         155         160
Tyr Cys Ala Glu Lys Lys Ala Thr Pro Ile Lys Leu Ile Trp Ser Leu
          165         170         175
Val Ala Leu Ile Phe Thr Phe Phe Val Pro Leu Leu Ser Ile Val Thr
          180         185         190
Cys Tyr Cys Cys Ile Ala Arg Lys Leu Cys Ala His Tyr Gln Gln Ser
          195         200         205
Gly Lys His Asn Lys Lys Leu Lys Lys Ser Ile Lys Ile Ile Phe Ile
          210         215         220
Val Val Ala Ala Phe Leu Val Ser Trp Leu Pro Phe Asn Thr Phe Lys
225         230         235         240
Phe Leu Ala Ile Val Ser Gly Leu Arg Gln Glu His Tyr Leu Pro Ser
          245         250         255
Ala Ile Leu Gln Leu Gly Met Glu Val Ser Gly Pro Leu Ala Phe Ala
          260         265         270
Asn Ser Cys Val Asn Pro Phe Ile Tyr Tyr Ile Phe Asp Ser Tyr Ile
          275         280         285
Arg Arg Ala Ile Val His Cys Leu Cys Pro Cys Leu Lys Asn
          290         295         300

```

<210> 2257

<211> 336

<212> PRT

<213> Homo sapien (8318124-7-422-2124)

<220>

<221> VARIANT

<222> (1)...(336)

<223> Xaa = Any Amino Acid

<400> 2257

Asp Thr Asp Pro Gln Ser Leu Thr Asp Val Ser Ile Phe Leu Leu Leu
 1 5 10 15
 Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Val Ala Gly Leu Phe
 20 25 30
 Leu Ser Met Cys Leu Val Met Val Leu Glu Asn Leu Leu Ile Ile Leu
 35 40 45
 Asp Val Ser Pro Asp Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu
 50 55 60
 Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro
 65 70 75 80
 Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Tyr Ala Gly
 85 90 95
 Cys Leu Thr Val Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu Glu
 100 105 110
 Asn Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
 115 120 125
 His Pro Leu Tyr Arg Ser Ala Thr Leu Asn Pro Cys Phe Cys Gly Phe
 130 135 140
 Leu Asp Leu Leu Ser Phe Phe Phe Phe Ser Leu Arg Leu Leu Asp Ser
 145 150 155 160
 Gln Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp Val
 165 170 175
 Glu Ile Pro Asn Phe Phe Trp Glu Pro Ser Gln Leu Pro His Leu Ala
 180 185 190
 Cys Cys Asp Thr Phe Thr Arg Asn Ile Ser Met Tyr Phe Pro Ala Ala
 195 200 205
 Val Phe Gly Phe Leu Ser Ile Ser Gly Thr Leu Phe Ser Tyr Cys Lys
 210 215 220
 Met Val Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys
 225 230 235 240
 Ala Phe Ser Thr Xaa Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr
 245 250 255
 Gly Thr Gly Phe Gly Glu Tyr Leu Gly Ser Asp Val Ser Ser Pro
 260 265 270
 Arg Lys Gly Ala Val Ala Ser Val Met Tyr Ser Val Val Thr Pro Met
 275 280 285
 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Gly Asp Ile Lys Ser Val
 290 295 300
 Leu Arg Arg Pro Gln Gly Ser Thr Val Ser Ser Gln Tyr Leu Leu Ile
 305 310 315 320
 Cys Ser Ile Pro Phe Val Gly Trp Val Asn Lys Asp Ser Lys Val Lys
 325 330 335

<210> 2258

<211> 319

<212> PRT

<213> Homo sapien (8348136-100-2086-3409)

<220>

<221> VARIANT

<222> (1)...(319)

<223> Xaa = Any Amino Acid

<400> 2258

Ser His Thr Glu Pro Gln Asn Leu Thr Gly Val Ser Glu Phe Leu Leu
 1 5 10 15
 Leu Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Leu Leu Ala Gly Leu
 20 25 30

Phe Leu Ser Met Cys Leu Val Thr Met Leu Arg Glu Leu Leu Ile Ile
 35 40 45
 Leu Ala Val Thr Ser Asp Ser His Leu His Ile Pro Met Tyr Phe Phe
 50 55 60
 Leu Ser Asn Leu Val Leu Gly His Asp Ile Gly Phe Thr Xaa Ala Thr
 65 70 75 80
 Val Pro Lys Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser
 85 90 95
 His Ala Gly Cys Leu Thr Gln Ile Pro Phe Phe Val Leu Phe Val Cys
 100 105 110
 Ile Asp Asp Met Leu Leu Thr Val Met Ala Tyr Asp Xaa Phe Val Ala
 115 120 125
 Ile Cys His Pro Leu His Tyr Pro Val Ile Met Asn Pro His Leu Cys
 130 135 140
 Val Phe Leu Val Leu Met Phe Phe Leu Ser Leu Leu Asp Ser Xaa Leu
 145 150 155 160
 His Asn Trp Ile Val Gln Phe Thr Cys Phe Lys Asn Val Glu Ile Ser
 165 170 175
 Asn Phe Phe Cys Asp Xaa Ser Gln Leu Leu Asn Leu Ala Cys Ser Asp
 180 185 190
 Val Ile Ser Asn Ile Phe Ile His Leu Asp Ser Thr Ile Phe Gly Phe
 195 200 205
 Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile Val Pro Ser
 210 215 220
 Ile Leu Arg Ile Pro Leu Ser Asp Gly Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ala Ile Val Cys Leu Phe Tyr Gly Thr Gly Ile
 245 250 255
 Gly Met Tyr Leu Thr Ser Ala Val Ser Pro Ala Pro Arg Asn Gly Val
 260 265 270
 Val Ala Ser Val Leu Tyr Ala Ile Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Cys Ser Leu Arg Asn Arg Gly Ile Gln Ser Ala Leu Trp Arg Leu
 290 295 300
 Cys Arg Arg Lys Val Xaa Ser His Asp Leu Phe His Pro Phe Ser
 305 310 315

<210> 2259

<211> 186

<212> PRT

<213> Homo sapien (8389427-13-4913-5701)

<220>

<221> VARIANT

<222> (1)...(186)

<223> Xaa = Any Amino Acid

<400> 2259

Pro Val Pro Gln His Leu Phe Phe Phe Leu Lys Val Thr Gly His Leu
 1 5 10 15
 Leu Thr Xaa Ile Arg Asn Leu Xaa Phe Val Pro Asp Phe Ser Phe Ser
 20 25 30
 Leu Ala Leu His Ile Tyr Gln Xaa Tyr Xaa Phe Xaa Thr Asn Leu Asn
 35 40 45
 Glu Leu His Leu Cys Pro Ser Leu Ile Ser Pro Pro Ser Leu Ser Val
 50 55 60
 His Xaa Leu Arg Leu His His Val Asn Tyr Tyr His Gly Met Leu Thr
 65 70 75 80
 Glu Leu Leu Leu Pro Met Val Pro Cys His Asn Ser Ser Phe Ile Trp
 85 90 95
 Leu Pro Ile Asn Phe Xaa Lys Phe Ile Cys Ile Cys Tyr Phe Ser Gly

```

      100      105      110
Xaa Lys Leu Pro Met His Val Glu Asp Gly Met Gln Thr Ala Leu His
      115      120      125
Ala Cys Pro Leu Leu Met Gln Leu Leu Leu Ser Ile Pro His Ser Tyr
      130      135      140
Pro Leu Leu Leu Asp Asn Ser Phe Leu Phe Leu Arg Leu His Pro Arg
145      150      155      160
Ser Lys Leu Ser Tyr Phe Leu His Ile Leu Leu Ser Xaa Pro Phe Thr
      165      170      175
Tyr Val Asn His Leu Leu Pro Phe Leu Leu
      180      185

```

<210> 2260

<211> 304

<212> PRT

<213> Homo sapien (8389428-12-1-2464)

<400> 2260

```

Met Arg Asn Gly Thr Val Ile Thr Glu Phe Ile Leu Leu Gly Phe Pro
 1      5      10      15
Val Ile Gln Gly Leu Gln Thr Pro Leu Phe Ile Ala Ile Phe Leu Thr
      20      25      30
Tyr Ile Leu Thr Leu Ala Gly Asn Gly Leu Ile Ile Ala Thr Val Trp
      35      40      45
Ala Glu Pro Arg Leu Gln Ile Pro Met Tyr Phe Phe Leu Cys Asn Leu
      50      55      60
Ser Phe Leu Glu Ile Trp Tyr Thr Thr Thr Val Ile Pro Lys Leu Leu
65      70      75      80
Gly Thr Phe Val Val Ala Arg Thr Val Ile Cys Met Ser Cys Cys Leu
      85      90      95
Leu Gln Ala Phe Phe His Phe Phe Val Gly Thr Thr Glu Phe Leu Ile
      100      105      110
Leu Thr Ile Met Ser Phe Asp Arg Tyr Leu Thr Ile Cys Asn Pro Leu
      115      120      125
His His Pro Thr Ile Met Thr Ser Lys Leu Cys Leu Gln Leu Ala Leu
      130      135      140
Ser Ser Trp Val Val Gly Phe Thr Ile Val Phe Cys Gln Thr Met Leu
145      150      155      160
Leu Ile Gln Leu Pro Phe Cys Gly Asn Asn Val Ile Ser His Phe Tyr
      165      170      175
Cys Asp Val Gly Pro Ser Leu Lys Ala Ala Cys Ile Asp Thr Ser Ile
      180      185      190
Leu Glu Leu Leu Gly Val Ile Ala Thr Ile Leu Val Ile Pro Gly Ser
      195      200      205
Leu Leu Phe Asn Met Ile Ser Tyr Ile Tyr Ile Leu Ser Ala Ile Leu
      210      215      220
Arg Ile Pro Ser Ala Thr Gly His Gln Lys Thr Phe Ser Thr Cys Ala
225      230      235      240
Ser His Leu Thr Val Val Ser Leu Leu Tyr Gly Ala Val Leu Phe Met
      245      250      255
Tyr Leu Arg Pro Thr Ala His Ser Ser Phe Lys Ile Asn Lys Val Val
      260      265      270
Ser Val Leu Asn Thr Ile Leu Thr Pro Leu Leu Asn Pro Phe Ile Tyr
      275      280      285
Thr Ile Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Ala Met Thr
      290      295      300

```

<210> 2261

<211> 275

<212> PRT

<213> Homo sapien (8439748-1-6412-8052)

<220>

<221> VARIANT

<222> (1)...(275)

<223> Xaa = Any Amino Acid

<400> 2261

```

Thr Ile Ile Asn Val Asn Ile Ser Pro Glu Phe Val Leu Val Gly Phe
 1           5           10           15
Ser Ser Asp Ala Glu Ile Gln Ile Met Leu Phe Val Leu Ile Leu Val
          20           25           30
Ile His Leu Leu Thr Leu Thr Gly Lys Leu Val Met Ile Leu Glu Ile
          35           40           45
Arg Ala Asp Ser His Leu Gln Arg Pro Met Tyr Phe Phe Leu Xaa His
          50           55           60
Leu Ser Phe Leu Asp Leu Ser Tyr Ser Ser Val Thr Val Pro Arg Met
65           70           75           80
Leu Gln Asn Phe Leu Ser Gly Arg Lys Ala Ser Gln Cys Gly Ala Ala
          85           90           95
Ser Pro Ser Phe Phe Phe Thr Leu Ser Gly Gly Thr Glu Ala Cys Leu
          100          105          110
Phe Ser Ala Met Ala Tyr Asp His Tyr Ala Thr Ile Arg His Pro Val
          115          120          125
Val Tyr Thr Met Val Met Asn Arg Ser Leu Cys Met Val Ile Leu Arg
          130          135          140
Ile Ala Trp Ala Ala Gly Phe Leu Ile Ser Leu Met Asp Ser Leu Phe
145          150          155          160
Thr His Lys Leu His Phe Cys Gly Pro Asp Ile Ile Pro Tyr Phe Arg
          165          170          175
Cys Lys Leu Pro Pro Phe Phe Pro Leu Ser Tyr Ile Asp Pro Thr Val
          180          185          190
Asn Glu Ile Leu Leu Ala Val Ser Gln Ala Phe Trp Gly Leu Leu Thr
          195          200          205
Leu Ser Leu Ile Phe Phe Ser Tyr Ser Arg Ile Thr Ser Val Ile Leu
          210          215          220
Ser Ile Cys Ser Ser Glu Gly Gln Gly Lys Ala Phe Ser Ala Cys Pro
225          230          235          240
Ser His Leu Ala Val Val Leu Ser Phe Tyr Gly Thr Ala Phe Phe Arg
          245          250          255
Tyr Pro Gly Ser Thr Ser Gly Ser Val Leu Gly Gln Val Val Ser Val
          260          265          270
Gln Tyr Ser
          275

```

<210> 2262

<211> 317

<212> PRT

<213> Homo sapien (8439748-5-3942-6516)

<400> 2262

```

Met Leu Arg Asn Gly Ser Ile Val Thr Glu Phe Ile Leu Val Gly Phe
 1           5           10           15
Gln Gln Ser Ser Thr Ser Thr Arg Ala Leu Leu Phe Ala Leu Phe Leu
          20           25           30
Ala Leu Tyr Ser Leu Thr Met Ala Met Asn Gly Leu Ile Ile Phe Ile
          35           40           45
Thr Ser Trp Thr Asp Pro Lys Leu Asn Ser Pro Met Tyr Phe Phe Leu
          50           55           60
Gly His Leu Ser Leu Leu Asp Val Cys Phe Ile Thr Thr Thr Ile Pro
65           70           75           80
Gln Met Leu Ile His Leu Val Val Arg Asp His Ile Val Ser Phe Val

```

```
<210> 2263
<211> 320
<212> PRT
<213> Homo sapien (8439993-14-9565-12410)
```

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 2263 | | | | | | | | | | | | | | | |
| Met | Leu | His | Thr | Asn | Asn | Thr | Gln | Phe | His | Pro | Ser | Thr | Phe | Leu | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Gly | Val | Pro | Gly | Leu | Glu | Asp | Val | His | Val | Trp | Ile | Gly | Phe | Pro |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Phe | Ala | Val | Tyr | Leu | Thr | Ala | Leu | Leu | Gly | Asn | Ile | Ile | Ile | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Phe | Val | Ile | Gln | Thr | Glu | Gln | Ser | Leu | His | Gln | Pro | Met | Phe | Tyr | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Ala | Met | Leu | Ala | Gly | Thr | Asp | Leu | Gly | Leu | Ser | Thr | Ala | Thr | Ile |
| 65 | | | | | 70 | | | | | | 75 | | | | 80 |
| Pro | Lys | Met | Leu | Gly | Ile | Phe | Trp | Phe | Asn | Leu | Gly | Glu | Ile | Ala | Phe |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Ala | Cys | Ile | Thr | Gln | Met | Tyr | Thr | Ile | His | Ile | Cys | Thr | Gly | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Glu | Ser | Val | Val | Leu | Thr | Val | Thr | Gly | Ile | Asp | Arg | Tyr | Ile | Ala | Ile |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Cys | Asn | Pro | Leu | Arg | Tyr | Ser | Met | Ile | Leu | Thr | Asn | Lys | Val | Ile | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ile | Leu | Gly | Ile | Val | Ile | Ile | Val | Arg | Thr | Leu | Val | Phe | Val | Thr | Pro |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Phe | Thr | Phe | Leu | Thr | Leu | Arg | Leu | Pro | Phe | Cys | Gly | Val | Arg | Ile | Ile |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Pro | His | Thr | Tyr | Cys | Glu | His | Met | Gly | Leu | Ala | Lys | Leu | Ala | Cys | Ala |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ser | Ile | Asn | Val | Ile | Tyr | Gly | Leu | Ile | Ala | Phe | Ser | Val | Gly | Tyr | Ile |

```

      195              200              205
Asp Ile Ser Val Ile Gly Phe Ser Tyr Val Gln Ile Leu Arg Ala Val
  210              215              220
Phe His Leu Pro Ala Trp Asp Ala Arg Leu Lys Ala Leu Ser Thr Cys
  225              230              235              240
Gly Ser His Val Cys Val Met Leu Ala Phe Tyr Leu Pro Ala Leu Phe
      245              250              255
Ser Phe Met Thr His Arg Phe Gly His Asn Ile Pro His Tyr Ile His
      260              265              270
Ile Leu Leu Ala Asn Leu Tyr Val Val Phe Pro Pro Ala Leu Asn Ser
      275              280              285
Val Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Gln Val Leu Arg
      290              295              300
Ile Leu Asn Pro Lys Ser Phe Trp His Phe Asp Pro Lys Arg Ile Phe
  305              310              315              320

```

<210> 2264

<211> 329

<212> PRT

<213> Homo sapien (8439993-17-12459-15729)

<220>

<221> VARIANT

<222> (1)...(329)

<223> Xaa = Any Amino Acid

<400> 2264

```

Met Asn Gly Ala Asn Ser Ser Ser Leu Thr Pro Arg Tyr Phe Ile Leu
  1              5              10              15
Ser Gly Val Pro Gly Leu Glu Ala Ala His Ile Trp Ile Ser Leu Pro
      20              25              30
Phe Cys Phe Met Tyr Ile Ile Val Val Leu Gly Asn Cys Gly Leu Ile
      35              40              45
Tyr Leu Ile Ser His Glu Glu Ala Leu His Gln Pro Thr Tyr Tyr Phe
      50              55              60
Leu Asp Leu Leu Ser Leu Thr Asp Val Thr Gly Cys Thr Ser Phe Val
  65              70              75              80
Pro Asn Met Leu Cys Ile Phe Trp Phe Gly Leu Lys Glu Ile Asp Phe
      85              90              95
Asn Ala Cys Leu Val Gln Met Phe Phe Ile His Met Leu Thr Gly Met
      100              105              110
Glu Ser Gly Ala Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
      115              120              125
Cys Tyr Pro Leu His Tyr Ser Thr Ile Phe Thr Asn Thr Val Ile Thr
      130              135              140
Lys Val Gly Leu Val Thr Phe Ile Gln Ser Val Leu Leu Met Ile Pro
  145              150              155              160
Phe Ala Phe Leu Ile Lys Cys Leu Pro Tyr Cys Arg Gly Asn Leu Ile
      165              170              175
His His Thr Tyr Cys Xaa His Met Ser Val Ala Lys Leu Ser Cys Gly
      180              185              190
Asn Val Gln Ile Asn Ala Ile Tyr Gly Leu Ile Ala Ala Ile Leu Ile
      195              200              205
Gly Gly Phe Asp Met Phe Cys Ile Ser Met Ser Tyr Thr Met Ile Ile
      210              215              220
Arg Ala Val Val Asn Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
  225              230              235              240
Ser Thr Cys Thr Ala His Ile Cys Ala Ile Phe Ile Thr Tyr Val Pro
      245              250              255
Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
      260              265              270

```

His His Val His Ile Phe Ile Ala Asn Leu Tyr Leu Met Leu Pro Pro
 275 280 285
 Thr Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu
 290 295 300
 Gly Val Ile Lys Leu Phe Phe Arg Glu Lys Val Tyr Phe Lys Tyr Asp
 305 310 315 320
 Ile Asn Leu Xaa Tyr Arg Ser Leu Asn
 325

<210> 2265

<211> 324

<212> PRT

<213> Homo sapien (8439993-2-191-1624)

<400> 2265

Met Pro Leu Phe Asn Ser Leu Cys Trp Phe Pro Thr Ile His Val Thr
 1 5 10 15
 Pro Pro Ser Phe Ile Leu Asn Gly Ile Pro Gly Leu Glu Arg Val His
 20 25 30
 Val Trp Ile Ser Leu Pro Leu Cys Thr Met Tyr Ile Ile Phe Leu Val
 35 40 45
 Gly Asn Leu Gly Leu Val Tyr Leu Ile Tyr Tyr Glu Glu Ser Leu His
 50 55 60
 His Pro Met Tyr Phe Phe Phe Gly His Ala Leu Ser Leu Ile Asp Leu
 65 70 75 80
 Leu Thr Cys Thr Thr Thr Leu Pro Asn Ala Leu Cys Ile Phe Trp Phe
 85 90 95
 Ser Leu Lys Glu Ile Asn Phe Asn Ala Cys Leu Ala Gln Met Phe Phe
 100 105 110
 Val His Gly Phe Thr Gly Val Glu Ser Gly Val Leu Met Leu Met Ala
 115 120 125
 Leu Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Ala Thr Thr
 130 135 140
 Leu Thr Asn Pro Ile Ile Ala Lys Ala Glu Leu Ala Thr Phe Leu Arg
 145 150 155 160
 Gly Val Leu Leu Met Ile Pro Phe Pro Phe Leu Val Lys Arg Leu Pro
 165 170 175
 Phe Cys Gln Ser Asn Ile Ile Ser His Thr Tyr Cys Asp His Met Ser
 180 185 190
 Val Val Lys Leu Ser Cys Ala Ser Ile Lys Val Asn Val Ile Tyr Gly
 195 200 205
 Leu Met Val Ala Leu Leu Ile Gly Val Phe Asp Ile Cys Cys Ile Ser
 210 215 220
 Leu Ser Tyr Thr Leu Ile Leu Lys Ala Ala Ile Ser Leu Ser Ser Ser
 225 230 235 240
 Asp Ala Arg Gln Lys Ala Phe Ser Thr Cys Thr Ala His Ile Ser Ala
 245 250 255
 Ile Ile Ile Thr Tyr Val Pro Ala Phe Phe Thr Phe Phe Ala His Arg
 260 265 270
 Phe Gly Gly His Thr Ile Pro Pro Ser Leu His Ile Ile Val Ala Asn
 275 280 285
 Leu Tyr Leu Leu Leu Pro Pro Thr Leu Asn Pro Ile Val Tyr Gly Val
 290 295 300
 Lys Thr Lys Gln Ile Arg Lys Ser Val Ile Lys Phe Phe Gln Gly Asp
 305 310 315 320
 Lys Gly Ala Gly

<210> 2266

<211> 312

<212> PRT

<213> Homo sapien (8516051-13-18887-21998)

<400> 2266

```

Met Asp Thr Gly Asn Trp Ser Gln Val Ala Glu Phe Ile Ile Leu Gly
 1           5           10           15
Phe Pro His Leu Gln Gly Val Gln Ile Tyr Leu Phe Leu Leu Leu
 20           25           30
Leu Ile Tyr Leu Met Thr Val Leu Gly Asn Leu Leu Ile Phe Leu Val
 35           40           45
Val Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr His Phe Val Ser
 50           55           60
Ile Leu Ser Phe Ser Glu Leu Gly Tyr Thr Ala Ala Thr Ile Pro Lys
 65           70           75           80
Met Leu Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ser Gly
 85           90           95
Cys Leu Leu Gln Ile Tyr Phe Phe His Ser Leu Gly Ala Thr Glu Cys
 100          105          110
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg
 115          120          125
Pro Leu His Tyr Pro Thr Leu Met Thr Pro Thr Leu Cys Ala Glu Ile
 130          135          140
Ala Ile Gly Cys Trp Leu Gly Gly Leu Ala Gly Pro Val Val Glu Ile
 145          150          155          160
Ser Leu Ile Ser Arg Leu Pro Phe Cys Gly Pro Asn Arg Ile Gln His
 165          170          175
Val Phe Cys Asp Phe Pro Pro Val Leu Ser Leu Ala Cys Thr Asp Thr
 180          185          190
Ser Ile Asn Val Leu Val Asp Phe Val Ile Asn Ser Cys Lys Ile Leu
 195          200          205
Ala Thr Phe Leu Leu Ile Leu Cys Ser Tyr Val Gln Ile Ile Cys Thr
 210          215          220
Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Ile Ser Thr
 225          230          235          240
Cys Ala Ser His Phe Thr Val Val Leu Ile Phe Tyr Gly Ser Ile Leu
 245          250          255
Ser Met Tyr Val Gln Leu Lys Lys Ser Tyr Ser Leu Asp Tyr Asp Gln
 260          265          270
Ala Leu Ala Val Val Tyr Ser Val Leu Thr Pro Phe Leu Asn Pro Phe
 275          280          285
Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Val Arg Arg Gln
 290          295          300
Leu Lys Arg Ile Gly Ile Leu Ala
305          310

```

<210> 2267

<211> 289

<212> PRT

<213> Homo sapien (8516051-8-7333-8874)

<220>

<221> VARIANT

<222> (1)...(289)

<223> Xaa = Any Amino Acid

<400> 2267

```

Leu Leu Phe Phe Ile Leu Leu Leu Ile Tyr Leu Phe Thr Ile Ile
 1           5           10           15
Gly Ser Leu Met Val Phe Phe Ala Ile Lys Leu Asp Phe Cys Leu His
 20           25           30
Ser Ser Leu Tyr Phe Phe Ile Ser Val Leu Ser Phe Leu Glu Ile Trp
 35           40           45

```

Tyr Thr Thr Ile Thr Ile Pro Lys Met Phe Phe Asn Leu Ala Ser Glu
 50 55 60
 Gln Lys Thr Thr Ser Leu Asp Gly Cys Leu Leu Gln Met Tyr Phe Phe
 65 70 75 80
 Tyr Ser Leu Gly Ile Thr Glu Val Cys Leu Leu Thr Thr Arg Ala Met
 85 90 95
 Asp Arg Tyr Leu Ala Ile Cys Asn His Leu Cys Tyr Pro Thr Val Thr
 100 105 110
 Thr Pro Xaa Leu Tyr Thr Gln Val Ile Leu Gly Cys Cys Ile Cys Gly
 115 120 125
 Phe Phe Thr Leu Leu Pro Glu Ile Ala Trp Ile Ser Thr Leu Pro Phe
 130 135 140
 Cys Gly Pro Asn Gln Ile His Asn Ile Phe Cys Asp Leu Asp Pro Ile
 145 150 155 160
 Leu Asn Leu Ala Cys Val Asp Thr Gly Pro Val Val Leu Ile Lys Val
 165 170 175
 Val Asp Ile Val His Ala Val Glu Ile Thr Ala Ile Met Leu Val
 180 185 190
 Thr Leu Ala Tyr Val Gln Ile Ile Ala Val Ile Leu Arg Asn Cys Ser
 195 200 205
 Ala Asp Gly Cys Gln Lys Ala Phe Ser Thr Tyr Ala Phe His Leu Ala
 210 215 220
 Ile Phe Leu Ile Phe Phe Gly Ser Val Ala Leu Met Tyr Leu Leu Phe
 225 230 235 240
 Ser Ala Lys Tyr Ser Phe Phe Trp Asp Thr Thr Ile Ser Leu Met Phe
 245 250 255
 Ala Val Leu Ser Pro Thr Pro Ile Ile Cys Ser Leu Arg Asn Lys Glu
 260 265 270
 Ile Lys Glu Ala Ile Lys Lys His Met Cys Gln Ser Met Ile Cys Thr
 275 280 285
 His

<210> 2268

<211> 166

<212> PRT

<213> Homo sapien (8516144-1-909-1747)

<220>

<221> VARIANT

<222> (1)...(166)

<223> Xaa = Any Amino Acid

<400> 2268

Met Tyr Thr Thr Leu Leu Met Ala Arg Leu Cys Leu Cys Ala Asp Asn
 1 5 10 15
 Val Ile Pro His Ser Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala
 20 25 30
 Leu Ser Asp Thr Arg Val Asn Glu Xaa Val Ile Phe Ile Met Gly Gly
 35 40 45
 Leu Ile Leu Val Ile Pro Ser Ile Leu Ile Leu Gly Ser Tyr Ala Arg
 50 55 60
 Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser Lys Cys Ile Cys Lys
 65 70 75 80
 Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
 85 90 95
 Gly Thr Val Ile Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr
 100 105 110
 Leu Lys Asp Thr Val Met Ala Met Tyr Thr Val Val Thr Pro Met
 115 120 125
 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala

130 135 140
 Leu Ser Arg Val Ile His Gln Lys Lys Thr Phe Phe Ser Leu Xaa Xaa
 145 150 155 160
 Xaa His Leu Glu Leu Leu
 165

<210> 2269
 <211> 540
 <212> PRT
 <213> Homo sapien (8516144-24-10674-13726)

<220>
 <221> VARIANT
 <222> (1)...(540)
 <223> Xaa = Any Amino Acid

<400> 2269
 Met Asp Leu Gly Asn Ser Gly Asn Asp Ser Val Val Thr Lys Phe Val
 1 5 10 15
 Leu Leu Gly Leu Thr Glu Thr Ala Ala Leu Gln Pro Ile Leu Phe Val
 20 25 30
 Ile Phe Leu Leu Ala Tyr Val Thr Thr Ile Gly Gly Thr Leu Ser Ile
 35 40 45
 Leu Ala Ala Ile Leu Met Glu Thr Lys Leu His Ser Pro Met Tyr Phe
 50 55 60
 Phe Leu Gly Asn Leu Ser Leu Pro Asp Val Gly Cys Val Ser Val Thr
 65 70 75 80
 Val Pro Ala Met Leu Ser His Phe Ile Ser Asn Asp Arg Ser Ile Pro
 85 90 95
 Tyr Lys Ala Cys Leu Ser Glu Leu Phe Phe Phe His Leu Leu Ala Gly
 100 105 110
 Ala Asp Cys Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Leu Ala
 115 120 125
 Ile Cys Gln Ser Leu Thr Tyr Ser Ser Arg Met Ser Trp Gly Ile Gln
 130 135 140
 Gln Ala Leu Val Gly Met Ser Trp Val Phe Ser Phe Thr Asn Ala Leu
 145 150 155 160
 Thr Gln Thr Val Ala Leu Ser Pro Leu Asn Phe Cys Gly Pro Asn Val
 165 170 175
 Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Pro Phe Gln Leu Ser Cys
 180 185 190
 Ser Ser Val His Leu Asn Gly Gln Leu Leu Phe Val Ala Ala Ala Phe
 195 200 205
 Met Gly Val Ala Pro Leu Val Leu Ile Thr Val Ser Tyr Ala His Val
 210 215 220
 Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
 225 230 235 240
 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
 245 250 255
 Thr Gly Val Phe Ser Tyr Thr Arg Leu Gly Ser Val Glu Ser Ser Asp
 260 265 270
 Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
 275 280 285
 Asn Pro Leu Ile Tyr Trp Thr Ser Leu Leu Asp Val Gly Cys Ile Ser
 290 295 300
 His Cys Ser Ser Asp Ala Gly Val Ser Pro Gly Pro Pro Val Gln Ser
 305 310 315 320
 Pro Tyr Ala Ala Cys Ser Ser Gln Leu Phe Phe Pro His Leu Leu Ala
 325 330 335
 Gly Val Asp Cys His Leu Leu Ile Ala Met Ala Tyr Asp Arg Tyr Leu
 340 345 350

```

Ala Ile Cys Gln Leu Leu Thr Asn Ser Thr Arg Met Ser Cys Glu Val
      355                      360                      365
Gln Gly Ala Leu Val Gly Ile Cys Cys Thr Val Ser Phe Ile Asn Ala
      370                      375                      380
Leu Thr His Thr Val Ala Val Ser Ala Leu Asp Phe Cys Gly Pro Asn
385                      390                      395                      400
Val Val Asn His Phe Tyr Cys Asp Leu Pro Pro Leu Phe Gln Leu Ser
      405                      410                      415
Cys Ser Ser Ile His Leu Asn Gly Gln Leu Leu Leu Val Gly Ala Thr
      420                      425                      430
Phe Ile Gly Val Ile Pro Met Ile Phe Ile Ser Val Ser Tyr Ala His
      435                      440                      445
Val Thr Ala Ala Ile Leu Gln Ile Arg Ser Ala Glu Gly Arg Lys Lys
      450                      455                      460
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Xaa Ile Phe Tyr
465                      470                      475                      480
Gly Thr Gly Phe Phe Ser Tyr Met Cys Leu Gly Ser Val Ser Ala Ser
      485                      490                      495
Asp Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Ile Leu Ser Pro Met
      500                      505                      510
Leu Asn Pro Val Ile Tyr Ser Leu Gln Asn Pro Asp Val Gln Gly Thr
      515                      520                      525
Leu Lys Arg Val Leu Thr Gly Lys Arg Pro Pro Ala
530                      535                      540

```

<210> 2270
 <211> 106
 <212> PRT
 <213> Homo sapien (8518017-12-460-1010)

<220>
 <221> VARIANT
 <222> (1)...(106)
 <223> Xaa = Any Amino Acid

```

<400> 2270
Gln Leu Leu Ile Leu Ala Cys Ser Glu Ser Ser Leu Asn Ser Leu Tyr
1      5      10      15
Ser Phe Ile His Ser Phe Phe Cys Ser Phe Leu Pro Asn Ser Gly Tyr
      20      25      30
Leu Val Ser Gln Thr Asp Leu Val Pro Asp Leu Arg Glu Phe Arg Ile
      35      40      45
Xaa Ser Arg Arg His Ile Arg Asn Trp Asn Val Met Gly Ala Met Ile
50      55      60
Leu Asn Val Cys Glu Ala Thr Gly Asn Gly Val Ala Leu Pro Ile Ser
65      70      75      80
Lys Ala Ala Thr Pro Glu Ala Met Thr Gly Val Xaa Ser Glu His Asp
      85      90      95
Ile Ala Leu Leu Phe Trp Leu Leu Arg Leu
100                      105

```

<210> 2271
 <211> 223
 <212> PRT
 <213> Homo sapien (8546599-5-2194-2867)

<220>
 <221> VARIANT
 <222> (1)...(223)
 <223> Xaa = Any Amino Acid

<400> 2271

```

Val Arg His Pro Leu Arg Cys Gly Lys Xaa Glu Pro Ala Pro Leu Pro
 1          5          10          15
Pro Leu Ala Leu Arg Asn Pro Ile Met Thr Ser Cys Phe Cys Gly Phe
 20          25          30
Leu Val Leu Phe Phe Phe Phe Phe Leu Ser Pro Leu Asp Ala Gln
 35          40          45
Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Gln Asp Ala Glu
 50          55          60
Ile Pro Ser Phe Phe Trp Asp Pro Ser Gln Leu Pro His Leu Ala Cys
 65          70          75          80
Cys Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Leu Pro Ala Ala Ile
 85          90          95
Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Tyr Lys Ile
 100         105         110
Val Ser Ser Ile Leu Arg Val Ser Ser Arg Gly Lys Tyr Lys Ala
 115         120         125
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly
 130         135         140
Thr Gly Phe Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Pro Arg
 145         150         155         160
Lys Ala Ala Val Ala Ser Val Met Tyr Thr Val Ile Thr Ser Met Leu
 165         170         175
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Val Leu
 180         185         190
Arg Gln Pro His Gly Ser Thr Val Gln Phe Gln Tyr Leu Leu Ile Cys
 195         200         205
Ser Ile Pro Phe Val Val Trp Val Lys Lys Gly Ser Lys Val Lys
 210         215         220

```

<210> 2272

<211> 120

<212> PRT

<213> Homo sapien (8546616-1-110163-110999)

<220>

<221> VARIANT

<222> (1)...(120)

<223> Xaa = Any Amino Acid

<400> 2272

```

Val Cys Ile Asn Ile Ser Xaa His His Xaa His Met Tyr Phe Xaa Leu
 1          5          10          15
Ser Tyr Gly Ser Phe Xaa Glu Leu Leu Val His Ser Ala Glu Leu Pro
 20          25          30
Ser Arg Ile Trp Arg Leu Lys Ser Ser Xaa Ser Cys Lys Ile Leu Ser
 35          40          45
Gly Tyr Ser Asn Glu Val Trp Phe His Cys Ile Phe Leu Cys Leu Leu
 50          55          60
Ser Lys Arg Leu Lys Xaa Ala His Ser Asp Lys Cys Gly Gln Val Ser
 65          70          75          80
Leu Pro Leu His Pro Ser Leu Cys Leu Leu Leu Ser Leu Gly Asn Trp
 85          90          95
Cys Gly Lys Ser Leu Cys Pro Gly Met Ala Thr Leu Leu Val Ser Arg
 100         105         110
Leu Ile Gln Ser Ser Leu Cys Ser
 115         120

```

<210> 2273

<211> 260

<212> PRT

<213> Homo sapien (8547576-2-9950-11981)

<220>

<221> VARIANT

<222> (1)...(260)

<223> Xaa = Any Amino Acid

<400> 2273

```

Val Leu Cys Val Ile Phe Cys Lys Xaa Asn His His Ile Ser Leu Leu
 1           5           10           15
Ser Phe Phe Glu Tyr Leu Met Thr Xaa Xaa Lys Lys Tyr Gly Ser Ile
          20           25           30
Cys Ser Thr Met Leu Val Ser Ile Arg Ile Lys Tyr Leu Glu Val Phe
          35           40           45
Ala Glu Asn Leu Phe Gly Ala Ala Glu Ile Ile Pro Leu Met Trp Met
 50           55           60
Val His Gly Cys Tyr Val Thr Val Cys Asn Tyr Met Thr Ile Val Asn
65           70           75           80
Gln Tyr Arg Cys Ser His Leu Thr Gly Met Ala Trp Thr Glu Ser Phe
          85           90           95
Ile His Gly Thr Val Xaa Ile Leu Ser Pro Val Xaa Leu Pro Phe Tyr
          100          105          110
Asp Pro Asn Val Ile Ala His Phe Met Cys Asp Leu Asn Thr Phe Leu
          115          120          125
Lys Leu Leu Cys Met Gly Thr Thr Asn Thr Ile Gly Phe Phe Val Ala
          130          135          140
Ala Asn Gly Gly Phe Asn Tyr Leu Leu Asn Ile Ile Phe Leu Met Val
          145          150          155          160
Ser Xaa Val Ala Ile Leu Cys Thr Leu Lys Thr His Ser Leu Glu Glu
          165          170          175
Arg Cys Xaa Ser Leu Ser Thr Cys Ile Ser His Thr Thr Met Val Ile
          180          185          190
Leu Phe Phe Glu Phe Cys Ile Ser Val Tyr Leu Cys Pro Val Thr Leu
          195          200          205
Leu Pro Ile Asn Lys Ala Met Ala Val Phe His Thr Val Ile Asn Pro
          210          215          220
Met Leu Lys Pro Leu Val Tyr Thr Leu Arg Asn Ala Glu Val Lys Ser
          225          230          235          240
Ala Leu Arg Lys Val Trp Val Lys Arg Xaa Pro Glu Glu Arg Asn Asn
          245          250          255
Leu Asn Ile Arg
          260

```

<210> 2274

<211> 328

<212> PRT

<213> Homo sapien (8567470-5-1-1337)

<220>

<221> VARIANT

<222> (1)...(328)

<223> Xaa = Any Amino Acid

<400> 2274

```

Tyr Thr Asp Pro Gln Asn Leu Thr Asp Val Phe Ile Phe Leu Leu Leu
 1           5           10           15
Glu Leu Ser Glu Asp Pro Ala Leu Gln Leu Val Val Thr Gly Leu Cys
          20           25           30
Leu Met Cys Leu Val Thr Val Leu Trp Asn Leu Leu Ser Ile Leu Ala
          35           40           45
Val Ser Pro Asp Ser His Leu His Thr Pro Met His Phe Phe Leu Cys

```

```

50          55          60
Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro Lys
65          70          75          80
Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala Gly
85          90          95
Cys Leu Thr Gln Met Ser Leu Ser Ala Ile Phe Gly Gly Met Glu Glu
100          105          110
Asn Met Leu Leu Ser Val Met Ala Tyr Asp Gln Phe Val Ala Ile Cys
115          120          125
His Pro Leu Tyr His Ser Ala Ile Met Asn Pro Cys Phe Cys Gly Phe
130          135          140
Leu Val Leu Leu Ser Phe Phe Phe Ser Val Phe Xaa His Ser Gln Leu
145          150          155          160
Gln Asn Leu Ile Ala Leu Gln Ile Thr Cys Ser Lys Asp Val Glu Ile
165          170          175
Pro Asn Phe Phe Cys Asp Pro Ser Gln Leu Pro His Leu Ala Cys Cys
180          185          190
Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Phe Pro Ala Ala Ile Phe
195          200          205
Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Tyr Lys Ile Val
210          215          220
Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Ser Tyr Lys Ala Phe
225          230          235          240
Ala Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly Thr
245          250          255
Gly Val Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Leu Arg Lys
260          265          270
Arg Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn
275          280          285
Pro Leu Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Val Leu Trp
290          295          300
Gln Pro Cys Ser Arg Thr Ala Ala Gln Ser Pro Ser Gln Tyr Leu His
305          310          315          320
Leu Phe His Ser Phe Cys Arg Met
325

```

<210> 2275

<211> 310

<212> PRT

<213> Homo sapien (8567878-9-2833-5012)

<220>

<221> VARIANT

<222> (1)...(310)

<223> Xaa = Any Amino Acid

<400> 2275

```

Met Ala Lys Thr Asn Asn Ser Glu Val Thr Glu Phe Ile Leu Leu Gly
1      5      10      15
Leu Thr Asp Asn Pro Glu Leu Gln Ala Leu Phe Trp Gly Ile Phe Leu
20     25     30
Val Ile Asn Leu Ser Ser Val Met Gly Ser Leu Gly Leu Ile Met Leu
35     40     45
Ile His Ile Ser Pro Gln Leu His Thr Ala Met Tyr Phe Phe Leu Ser
50     55     60
His Val Ala Phe Val Tyr Phe Cys Tyr Thr Ser Ser Ile Thr Pro Asn
65     70     75     80
Ser Leu Val Asn Leu Leu Gln Glu Thr Lys Arg Ile Ser Leu Pro Thr
85     90     95
Cys Ala Ser Gln Leu His Cys Phe Ile Met Phe Val Val Cys Asp Met
100    105    110

```

Tyr Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125
 Pro Leu Leu Tyr Ser Ile Ile Met Asn Arg Arg Val Cys Ile Gln Met
 130 135 140
 Val Val Ser Thr Tyr Leu Tyr Gly Phe Ser Val Arg Leu Leu Gln Ala
 145 150 155 160
 Ile Leu Thr Phe His Leu Ser Phe Xaa Asp Ser Asn Ile Ile Asn Asn
 165 170 175
 Ser Tyr Cys Asp Asp Val Pro Leu Ala Cys Leu Pro Tyr His Lys Asn
 180 185 190
 His Tyr Lys Asp Val Lys Glu Leu Ile Leu Phe Thr Leu Ala Gly Phe
 195 200 205
 Asn Thr Leu Phe Ser Leu Leu Ile Ile Leu Ile Ser Tyr Ile Ser Val
 210 215 220
 Leu Ser Ala Ile Leu Arg Ile Asn Ser Ala Glu Ser Arg Gln Lys Ala
 225 230 235 240
 Phe Ser Thr Cys Asp Ser His Leu Thr Ser Ile Ile Ile Phe Tyr Gly
 245 250 255
 Ile Ile Thr Phe Met Tyr Met Gln Xaa Lys Thr Asn Asn Ser Leu Asp
 260 265 270
 Thr Asp Lys Ile Ala Ser Val Phe Cys Ile Val Lys Ile Pro Ser Ile
 275 280 285
 Tyr Ser Leu Arg Asn His Glu Val Lys Asp Ala Leu Lys Met Ile Met
 290 295 300
 Glu Asn Leu Cys Leu Thr
 305 310

<210> 2276

<211> 358

<212> PRT

<213> Homo sapien (8567902-2-5416-6914)

<220>

<221> VARIANT

<222> (1)...(358)

<223> Xaa = Any Amino Acid

<400> 2276

Val Ser Met Ser Phe Leu Ile Arg Ser Asp Ser Thr Leu His Thr Pro
 1 5 10 15
 Met Cys Leu Phe Leu Ser His Leu Ser Phe Val Asp Leu Tyr Tyr Ala
 20 25 30
 Thr Asn Ala Thr Pro Pro Met Leu Val Asn Phe Val Phe Ser Lys Arg
 35 40 45
 Lys Thr Val Ser Phe Ile Gly Cys Phe Ile Gln Phe His Leu Phe Ile
 50 55 60
 Ala Leu Val Ile Thr Asp Tyr His Met Leu Thr Val Met Val Tyr Asp
 65 70 75 80
 His Tyr Met Ala Ile Cys Lys Pro Leu Leu Tyr Gly Ser Lys Met Ser
 85 90 95
 Arg Cys Val Cys Leu Cys Leu Thr Ala Ala Pro Tyr Ile Tyr Gly Ser
 100 105 110
 Ala Asn Gly Leu Val Gln Val Ile Leu Met Leu Cys Leu Phe Phe Cys
 115 120 125
 Glu Pro His Glu Ile Asn His Phe Phe Phe Phe Gly Glu Asn Ala Leu
 130 135 140
 Tyr Ala His Leu Ile Pro Leu Xaa Ile Phe Glu Trp Thr Val Gly Glu
 145 150 155 160
 Glu Gly Arg Asn Asn Ile Asn Gly Glu Asn Thr Thr Gln Lys Val Tyr
 165 170 175
 Thr Met Gly Glu Arg Asn Leu Leu Ile Gln Val Ser Ile Phe Leu Leu

180 185 190
 Trp His Ile Arg Ser Xaa Leu Phe Ser Gln Tyr Glu Ala Ser Pro Arg
 195 200 205
 Ala Asp Ser Asp Val Lys Leu Glu Ile Asn His Phe Tyr Tyr Ala Glu
 210 215 220
 Pro Pro Leu Leu Val Leu Ala Cys Leu Asp Thr Tyr Val Lys Glu Thr
 225 230 235 240
 Ala Met Phe Met Val Ala Gly Ser Asn Leu Ile Cys Pro Leu Thr Ile
 245 250 255
 Ile Phe Ile Ser Tyr Thr Phe Ile Phe Thr Asp Ile Leu His Ile Cys
 260 265 270
 Thr Ala Glu Gly Arg Tyr Asn Ala Phe Ser Thr Cys Gly Ser Leu Val
 275 280 285
 Thr Ala Val Thr Val Phe Gln Gly Thr Leu Phe His Met Cys Leu Arg
 290 295 300
 Pro Pro Ser Glu Ala Ser Val Glu Gln Gly Lys Ile Val Ala Ala Phe
 305 310 315 320
 Tyr Ile Phe Val Ser Pro Thr Leu Asn Pro Leu Ile Tyr Arg Leu Arg
 325 330 335
 Asn Lys Asn Val Lys Arg Thr Ile Arg Glu Val Ile Gln Lys Lys Leu
 340 345 350
 Phe Ala Lys Xaa Gly Arg
 355

<210> 2277

<211> 305

<212> PRT

<213> Homo sapien (8567902-4-4497-6890)

<400> 2277

Met Ser Asn Thr Asn Gly Ser Ala Ile Thr Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Leu Thr Asp Cys Pro Glu Leu Gln Ser Leu Leu Phe Val Leu Phe Leu
 20 25 30
 Val Val Tyr Leu Val Thr Leu Leu Gly Asn Leu Gly Met Ile Met Leu
 35 40 45
 Met Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
 50 55 60
 Asn Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Asn Ala Thr Pro Gln
 65 70 75 80
 Met Ser Thr Asn Ile Val Ser Glu Lys Thr Ile Ser Phe Ala Gly Cys
 85 90 95
 Phe Thr Gln Cys Tyr Ile Phe Ile Ala Leu Leu Thr Glu Phe Tyr
 100 105 110
 Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asp Pro
 115 120 125
 Leu Arg Tyr Ser Val Lys Thr Ser Arg Arg Val Cys Ile Cys Leu Ala
 130 135 140
 Thr Phe Pro Tyr Val Tyr Gly Phe Ser Asp Gly Leu Phe Gln Ala Ile
 145 150 155 160
 Leu Thr Phe Arg Leu Thr Phe Cys Arg Ser Ser Val Ile Asn His Phe
 165 170 175
 Tyr Cys Ala Asp Pro Pro Leu Ile Lys Leu Ser Cys Ser Asp Thr Tyr
 180 185 190
 Val Lys Glu His Ala Met Phe Ile Ser Ala Gly Phe Asn Leu Ser Ser
 195 200 205
 Ser Leu Thr Ile Val Leu Val Ser Tyr Ala Phe Ile Leu Ala Ala Ile
 210 215 220
 Leu Arg Ile Lys Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr Cys
 225 230 235 240
 Gly Ser His Met Met Ala Val Thr Leu Phe Tyr Gly Thr Leu Phe Cys

245 250 255
 Met Tyr Ile Arg Pro Pro Thr Asp Lys Thr Val Glu Glu Ser Lys Ile
 260 265 270
 Ile Ala Val Phe Tyr Thr Phe Val Ser Pro Val Leu Asn Pro Leu Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Val Lys Gln Ala Leu Lys Asn Val Leu
 290 295 300
 Arg
 305

<210> 2278

<211> 319

<212> PRT

<213> Homo sapien (8567954-21-10804-13693)

<220>

<221> VARIANT

<222> (1)...(319)

<223> Xaa = Any Amino Acid

<400> 2278

Met Gly Val His Asn Leu Phe Thr Val Thr Gln Phe Ile Leu Ile Gly
 1 5 10 15
 Leu Ser Tyr Phe Ser Asn Glu His Tyr Leu Leu Phe Val Ala Leu Ala
 20 25 30
 Ile Ile Cys Gln Val Phe Leu Val Arg Ser Gly Asp Ile Leu Leu Ala
 35 40 45
 Ile Gly Thr Val Ile Lys Leu His Thr Thr Met Tyr Tyr Phe Leu Ala
 50 55 60
 Asn Val Ser Ile Leu Asp Ile Leu Cys Ser Ser Ala Thr Ile Pro Lys
 65 70 75 80
 Met Pro Lys Ile Leu Xaa Thr Glu Asp His Ser Ile Ser Phe Val Arg
 85 90 95
 Xaa Ala Leu Gln Pro Tyr Phe Leu Val Ala Trp Ala Gly Lys Lys Cys
 100 105 110
 Phe Leu Thr Val Thr Ala Tyr Asp Trp Cys Val Val Thr Cys Phe Ser
 115 120 125
 Leu Cys Tyr Ile Leu Ile Met Asn Lys Leu Val Ser Val Gln Leu Val
 130 135 140
 Tyr Gly Thr Xaa Ala Ala Gly Phe Leu Asn Phe Leu Leu Leu His Val
 145 150 155 160
 Val Ser Thr Leu Cys Leu Ser Phe Cys Lys Pro Asp Arg Val Asn Gln
 165 170 175
 Tyr Tyr Cys Asp Ile Ser Pro Met Gly Ala Leu Leu Cys Gln Ser Met
 180 185 190
 His Leu Ala Asn Met Leu Val Leu Val Glu Ser Val Ile Leu Gly Ile
 195 200 205
 Ser Ala Phe Leu Ala Ala Phe Asn Phe Tyr Ile Tyr Ile Ile Ser Thr
 210 215 220
 Ile Leu Lys Ile Gln Cys Val Glu Trp Ser Ala Lys Cys Phe Ser Thr
 225 230 235 240
 Cys Thr Ser His Leu Leu Thr Val Cys Leu Phe Tyr Gly Ile Leu Thr
 245 250 255
 Phe Thr Tyr Ile Tyr Ser Phe Ser Ser His Thr His Met Ser Lys Ala
 260 265 270
 Ser Pro Asp Leu Ala Thr Asp Arg Leu Ile Ser Met Leu Tyr Arg Val
 275 280 285
 Ile Thr Leu Met Phe Asn Phe Ile Thr Asp Asn Leu Arg Asn Thr Glu
 290 295 300
 Val Lys Gly Ala Ser Glu Arg Phe Tyr Val Ile Glu His Val Tyr
 305 310 315

<210> 2279
 <211> 307
 <212> PRT
 <213> Homo sapien (8567954-21-4824-8043)

<400> 2279
 Met Asn His Ser Val Val Thr Glu Phe Ile Ile Leu Gly Leu Thr Lys
 1 5 10 15
 Lys Pro Glu Leu Gln Gly Ile Ile Phe Leu Phe Phe Leu Ile Val Tyr
 20 25 30
 Leu Val Ala Phe Leu Gly Asn Met Leu Ile Ile Ile Ala Lys Ile Tyr
 35 40 45
 Asn Asn Thr Leu His Thr Pro Met Tyr Val Phe Leu Leu Thr Leu Ala
 50 55 60
 Val Val Asp Ile Ile Cys Thr Thr Ser Ile Ile Pro Lys Met Leu Gly
 65 70 75 80
 Thr Met Leu Thr Ser Glu Asn Thr Ile Ser Tyr Ala Gly Cys Met Ser
 85 90 95
 Gln Leu Phe Leu Phe Thr Trp Ser Leu Gly Ala Glu Met Val Leu Phe
 100 105 110
 Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
 115 120 125
 Tyr Ser Thr Val Met Asn His His Met Cys Val Ala Leu Leu Ser Met
 130 135 140
 Val Met Ala Ile Ala Val Thr Asn Ser Trp Val His Thr Ala Leu Ile
 145 150 155 160
 Met Arg Leu Thr Phe Cys Gly Pro Asn Thr Ile Asp His Phe Phe Cys
 165 170 175
 Glu Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Pro Val Arg Ile Asn
 180 185 190
 Glu Val Met Val Tyr Val Ala Asp Ile Thr Leu Ala Ile Gly Asp Phe
 195 200 205
 Ile Leu Thr Cys Ile Ser Tyr Gly Phe Ile Ile Val Ala Ile Leu Arg
 210 215 220
 Ile Arg Thr Val Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser
 225 230 235 240
 His Leu Thr Val Val Thr Leu Tyr Tyr Ser Pro Val Ile Tyr Thr Tyr
 245 250 255
 Ile Arg Pro Ala Ser Ser Tyr Thr Phe Glu Arg Asp Lys Val Val Ala
 260 265 270
 Ala Leu Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Met Val Tyr Ser
 275 280 285
 Phe Gln Asn Arg Glu Met Gln Ala Gly Ile Arg Lys Val Phe Ala Phe
 290 295 300
 Leu Lys His
 305

<210> 2280
 <211> 104
 <212> PRT
 <213> Homo sapien (8568141-22-12851-13662)

<220>
 <221> VARIANT
 <222> (1)...(104)
 <223> Xaa = Any Amino Acid

<400> 2280
 Leu Pro Pro Asn Ile Leu Cys Val Ile Ile Ser Tyr Ser Arg His Phe
 1 5 10 15

Ser Lys Leu Leu Lys Ile Pro Asn Ile Arg Thr Gln Ile Gln Lys Phe
 20 25 30
 Ser His Ile Ser Xaa Asn Leu Lys Lys Val Ser Val Leu Arg Leu Thr
 35 40 45
 Trp Thr Arg Tyr Pro Ser Xaa Met Leu Pro Xaa Tyr Pro Ala Pro Thr
 50 55 60
 Leu Thr Lys His Ile Pro Cys Gly Leu Val Thr Cys Leu Leu Gln Pro
 65 70 75 80
 Arg Met Ser Cys Trp Arg Ala Arg Asn Ala Pro Ser Thr Cys Leu Ala
 85 90 95
 Leu Thr Ala Lys His Ile Ser Ala
 100

<210> 2281

<211> 333

<212> PRT

<213> Homo sapien (8568143-10-1394-2684)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

<400> 2281

Met Gly Pro Lys Asn Leu Thr Arg Val Leu Glu Phe Phe Leu Leu His
 1 5 10 15
 Phe Leu Asp Asp Leu Glu Leu Gln Pro Phe Leu Ser Gly Cys Pro Xaa
 20 25 30
 Thr Met His Leu Val Thr Val Leu Ala Asn Leu Leu Thr Ser Phe Xaa
 35 40 45
 Leu Ser Ala Leu Pro His Leu His Asn Pro Met Asn Phe Asn Leu Ser
 50 55 60
 Leu Ala Asp Ile Gly Phe Thr Pro Ala Thr Ile Ser Lys Ile Thr Val
 65 70 75 80
 Asp Leu Gln Thr His Ser Arg Ile Ile Leu Tyr Met Ser Cys Leu Lys
 85 90 95
 Xaa Met Ser Phe Lys Ile Ile Phe Gly Cys Leu His Asn Leu Leu Ile
 100 105 110
 Thr Val Met Ala Tyr Asp Pro Phe Val Ala Thr Cys His Leu Leu Tyr
 115 120 125
 Tyr Thr Val Ile Arg Asn Pro His Leu Cys Gly Leu Leu Leu Val
 130 135 140
 Ser Leu Phe Ser Leu Ser Phe Phe Phe Leu Ile Ser Leu Leu Glu Thr
 145 150 155 160
 Gln Leu Tyr Ser Leu Met Val Ser Gln Val Leu Cys Met Gln Asp Val
 165 170 175
 Asp Ile Pro His Phe Phe Cys Asp Pro Ser Gln Phe Leu His Leu Ser
 180 185 190
 Cys Ser Asp Thr Ala Thr Asn Asn Thr Leu Met His Phe Ile Gly Ala
 195 200 205
 Ile Phe Cys Gly Pro Phe Ser Gly Ile Leu Tyr Cys Tyr Thr Gln Ile
 210 215 220
 Met Phe Ser Ile Leu Ile Thr Leu Xaa Asn Val Gly Ser Ile Lys Gln
 225 230 235 240
 Thr Phe Ser Thr His Arg Ser His Leu Ser Val Val Cys Leu Phe Tyr
 245 250 255
 Gly Thr Gly Leu Gly Val Tyr Leu Ser Leu Ala Gly Ser Pro Ser Pro
 260 265 270
 Arg Thr Gly Val Val Ala Ser Met Val Tyr Thr Thr Val Thr Leu Met
 275 280 285
 Leu Asn Pro Val Ile His Ser Leu Arg Asn Arg Asp Ile Lys Asn Thr

290 295 300
 Trp Trp Trp Leu Leu Ser Ile Thr Ala Trp Tyr Gln Tyr Leu Cys Tyr
 305 310 315 320
 Pro Leu Trp Ser Val Val Arg Lys Asn Ser Lys Leu Lys
 325 330

<210> 2282
 <211> 157
 <212> PRT
 <213> Homo sapien (8568247-23-1134-2556)

<220>
 <221> VARIANT
 <222> (1)...(157)
 <223> Xaa = Any Amino Acid

<400> 2282
 Phe Leu Lys Met Arg Leu Lys Glu Leu Met Xaa Asp Arg Thr Ile Met
 1 5 10 15
 Asp Tyr Trp Arg Glu Gly Arg His Ile Xaa Gly Met Phe Leu Ala Phe
 20 25 30
 Pro Phe Gly Xaa Pro Ile Pro Lys Leu Phe Leu Trp Val Ser Ile Arg
 35 40 45
 Asp Met Ala Val Thr Trp Met Asp His Arg His Glu Ser Cys Ser Pro
 50 55 60
 Phe Leu Pro Lys Leu Gln Pro Phe Ser Ser Cys His Val Ser Glu Leu
 65 70 75 80
 Cys Thr Cys Leu Asp Thr Phe Thr Lys Ser Tyr Ile Thr Xaa Ile Arg
 85 90 95
 Gly Leu Lys Gly Phe Asn His Leu Cys Phe Leu Leu His Tyr Cys His
 100 105 110
 Cys Ala Arg Ala Gln Val Ser Xaa Asn Ala Pro Trp Ser Leu Ala Gln
 115 120 125
 Arg Cys Gln Pro Asn Met Leu Ile Arg Xaa Leu Phe Cys Leu Lys Leu
 130 135 140
 Val Val His Asp Arg Leu Xaa His Val Leu Ser Leu Leu
 145 150 155

<210> 2283
 <211> 91
 <212> PRT
 <213> Homo sapien (8568259-4-1499-2114)

<220>
 <221> VARIANT
 <222> (1)...(91)
 <223> Xaa = Any Amino Acid

<400> 2283
 Gln Glu Ile Ser Ala Ala Arg Glu Arg Lys Ala Thr Lys Ile Leu Gly
 1 5 10 15
 Ile Ile Leu Gly Ala Phe Ile Ile Cys Trp Leu Pro Phe Phe Val Val
 20 25 30
 Ser Leu Val Leu Pro Ile Cys Arg Asp Ser Cys Trp Ile His Pro Ala
 35 40 45
 Leu Phe Asp Phe Phe Thr Trp Leu Gly Tyr Leu Asn Ser Leu Ile Asn
 50 55 60
 Pro Ile Ile Tyr Thr Val Phe Asn Glu Glu Phe Arg Gln Ala Phe Gln
 65 70 75 80
 Lys Ile Val Pro Phe Arg Lys Ala Ser Xaa Ser
 85 90

<210> 2284
 <211> 320
 <212> PRT
 <213> Homo sapien (8569904-8-5520-7957)

<400> 2284
 Met Asp Ser Pro Ser Asn Ala Thr Val Pro Cys Gly Phe Leu Leu Gln
 1 5 10 15
 Gly Phe Ser Glu Phe Pro His Leu Arg Pro Val Leu Phe Leu Leu Leu
 20 25 30
 Leu Gly Val His Leu Ala Thr Leu Gly Gly Asn Leu Leu Ile Leu Val
 35 40 45
 Ala Val Ala Ser Met Pro Ser Arg Gln Pro Met Leu Phe Leu Cys
 50 55 60
 Gln Leu Ser Ala Ile Glu Leu Cys Tyr Thr Leu Val Val Val Pro Arg
 65 70 75 80
 Ser Leu Val Asp Leu Ser Ser Arg Gly His Arg Arg Gly Ser Pro Ile
 85 90 95
 Ser Phe Leu Ser Cys Ala Phe Gln Met Gln Met Phe Val Ala Leu Gly
 100 105 110
 Gly Ala Glu Cys Phe Leu Leu Ala Ala Met Ala Asn Asp Arg Tyr Val
 115 120 125
 Ala Ile Cys His Pro Leu Arg Tyr Arg Ala Val Val Thr Pro Gly Leu
 130 135 140
 Cys Ala Arg Leu Val Ser Gly Cys Cys Leu Arg Gly Leu Ala Val Ser
 145 150 155 160
 Leu Gly Leu Thr Val Leu Ile Phe His Leu Pro Phe Cys Gly Ser Arg
 165 170 175
 Leu Leu Leu His Phe Phe Cys Asp Ile Thr Ala Leu Leu His Leu Ala
 180 185 190
 Cys Thr Arg Thr Thr Pro His Glu Leu Pro Leu Leu Gly Ala Cys Leu
 195 200 205
 Val Leu Leu Leu Leu Pro Ser Val Leu Ile Leu Ala Ser Tyr Gly Ala
 210 215 220
 Ile Ala Ala Ala Leu Val Arg Leu Arg Cys Pro Lys Gly Arg Gly Lys
 225 230 235 240
 Ala Ala Ser Thr Cys Ala Leu His Leu Ala Val Thr Phe Leu His Tyr
 245 250 255
 Gly Cys Ala Thr Phe Met Tyr Val Arg Pro Arg Ala Ser Tyr Ser Pro
 260 265 270
 Arg Leu Asp Arg Thr Leu Ala Leu Val Tyr Thr Asn Val Thr Pro Leu
 275 280 285
 Leu Cys Pro Leu Ile Tyr Ser Leu Arg Asn Arg Glu Ile Thr Ala Ala
 290 295 300
 Leu Ser Arg Val Leu Gly Arg Arg Arg Pro Gly Gln Ala Pro Gly Gly
 305 310 315 320

<210> 2285
 <211> 130
 <212> PRT
 <213> Homo sapien (8569934-12-21632-22280)

<220>
 <221> VARIANT
 <222> (1)...(130)
 <223> Xaa = Any Amino Acid

<400> 2285
 Lys Val Cys Leu Phe Gln Ala Leu Met Cys Trp Leu Ser Leu Xaa Gln
 1 5 10 15

Gln Pro Phe Thr Gln Ser Ala Ser Thr Leu Leu Leu Pro Leu Cys Ile
 20 25 30
 Pro Arg Gln Ala Pro Gln Cys Pro Gly Asp Leu Arg Thr Ala Leu Arg
 35 40 45
 Ala Val Met Cys Thr Arg Gly Cys Val Phe Xaa Ala Trp Glu Trp Val
 50 55 60
 Ala Ser Tyr Ile His Leu Ile Pro Leu Cys Ile Pro Val Arg Ser Ala
 65 70 75 80
 Tyr Asn Leu Gly Arg Val Leu Asn Gly Val Lys Trp Cys Ser Xaa Gly
 85 90 95
 Gln Gln Val Glu Phe Cys Ser Cys Lys Ala Lys Leu Met Leu Leu Ala
 100 105 110
 Ser Val Asp Val Val Leu Val Ser Thr Gln Pro Xaa Asn Pro Arg Pro
 115 120 125
 His Glu
 130

<210> 2286

<211> 318

<212> PRT

<213> Homo sapien (8569993-13-6018-8083)

<220>

<221> VARIANT

<222> (1)...(318)

<223> Xaa = Any Amino Acid

<400> 2286

Ile Ser Thr Met Ser Val Phe Lys Ser Ser Ala Xaa Asn Pro Arg Phe
 1 5 10 15
 Leu Gln Thr Gly Leu Ser Gly Leu Glu Ser Arg Tyr Asp Leu Ile Ser
 20 25 30
 Leu Pro Ile Phe Leu Val Tyr Ala Thr Ser Ile Ala Gly Asn Ile Ser
 35 40 45
 Ile Leu Phe Ile Ile Arg Thr Glu Ser Ser Leu His Gln Pro Met Tyr
 50 55 60
 Tyr Phe Leu Ser Met Leu Ala Phe Thr Asp Leu Gly Leu Ser Asn Thr
 65 70 75 80
 Thr Leu Pro Thr Met Phe Ser Val Phe Trp Phe His Ala Arg Glu Ile
 85 90 95
 Ser Phe Asn Ala Cys Leu Val Gln Met Tyr Phe Ile His Val Phe Ser
 100 105 110
 Ile Ile Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Cys Phe Ile
 115 120 125
 Ala Ile Xaa Glu Pro Leu Arg Tyr Ala Ala Ile Leu Thr Asn Asp Val
 130 135 140
 Ile Ile Gly Ile Gly Leu Ala Ile Ala Gly Arg Ala Leu Ala Leu Val
 145 150 155 160
 Phe Pro Ala Ser Phe Leu Leu Lys Arg Leu Gln Tyr His Asp Val Asn
 165 170 175
 Ile Leu Ser Tyr Leu Phe Cys Leu His Gln Asp Leu Ile Lys Thr Thr
 180 185 190
 Val Ser Asn Cys Arg Val Ser Ser Ile Tyr Gly Leu Met Val Val Ile
 195 200 205
 Cys Ser Met Gly Leu Asp Ser Val Leu Leu Leu Ser Tyr Val Leu
 210 215 220
 Ile Leu Gly Thr Ala Leu Ser Ile Ala Ser Lys Ala Glu Arg Val Arg
 225 230 235 240
 Ala Leu Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Thr Phe Tyr
 245 250 255
 Thr Pro Met Ile Gly Leu Ser Met Ile His Arg Tyr Gly Gln Asn Ala

260 265 270
 Pro His Ile Val His Val Leu Met Ala Asn Val Tyr Leu Met Gly Pro
 275 280 285
 Pro Leu Met Asn Pro Val Phe Tyr Ser Val Lys Thr Arg Gln Ile Arg
 290 295 300
 Asp Arg Ile Phe Gln Ile Lys Phe Arg Asn Met Lys Cys Arg
 305 310 315

<210> 2287
 <211> 235
 <212> PRT
 <213> Homo sapien (8570235-22-3034-4808)

<220>
 <221> VARIANT
 <222> (1)...(235)
 <223> Xaa = Any Amino Acid

<400> 2287
 Met Leu Phe Ile Ser Gln Trp Gly Glu Arg Xaa Arg Val Arg Arg Asn
 1 5 10 15
 Val Gln Leu Met Thr Ala Phe Ile Leu Met Asp Leu Pro His Val Pro
 20 25 30
 Ala Leu Asp Ala Pro Leu Phe Gly Val Phe Leu Val Val Tyr Val Leu
 35 40 45
 Thr Val Leu Gly Asn Leu Leu Ile Leu Leu Val Ile Arg Val Tyr Ser
 50 55 60
 His Leu His Thr Pro Lys Tyr Tyr Phe Leu Thr Asn Leu Ser Phe Ile
 65 70 75 80
 Asp Leu Trp Phe Phe Thr Val Met Val Pro Lys Met Pro Arg Thr Leu
 85 90 95
 Leu Ser Leu Cys Gly Lys Ala Val Ser Phe His Ser Cys Met Thr Gln
 100 105 110
 Leu Tyr Phe Phe Tyr Phe Leu Gly Ser Thr Glu Cys Leu Leu Tyr Thr
 115 120 125
 Val Met Ser Tyr Asp Arg Tyr Arg Gly Asn Thr Gln His Phe Pro Gly
 130 135 140
 Ser Glu Asn Leu Pro Thr Lys Xaa Ala Lys Cys Xaa Trp Pro Gly Gly
 145 150 155 160
 His Thr Gly Xaa Pro Leu Ile Ile Leu Ala Asp Leu Ser Gly Xaa Leu
 165 170 175
 Arg Val Asp Ser Ser Xaa Trp Ala Ile Gln Asn Xaa Xaa Tyr Asn Leu
 180 185 190
 Val Ile Gln Val Lys Phe Ile Thr Cys Ile Gly Leu Ser Ile Lys His
 195 200 205
 Tyr Ser Lys Gln Leu Ala Gln Leu Xaa Phe Phe His Arg Leu Ser Lys
 210 215 220
 Thr Phe Leu Asn Ser Gln Leu Asp Phe Tyr Leu
 225 230 235

<210> 2288
 <211> 325
 <212> PRT
 <213> Homo sapien (8570522-1-103735-108559)

<220>
 <221> VARIANT
 <222> (1)...(325)
 <223> Xaa = Any Amino Acid

<400> 2288

```

Met Lys Ile Asn Gln Thr Ile Leu Lys Glu Phe Ile Leu Val Gly Phe
 1           5           10           15
Ser Val Tyr Pro His Val Gln Thr Phe Leu Phe Val Val Phe Phe Cys
          20           25           30
Leu Tyr Leu Leu Thr Leu Ala Gly Asn Leu Thr Ile Met Gly Leu Thr
          35           40           45
Xaa Val Asp Arg Ser Leu His Thr Pro Met Tyr Leu Phe Leu Ser Ala
          50           55           60
Leu Ser Phe Ser Glu Thr Cys Tyr Thr Leu Thr Ile Val Pro Lys Met
65           70           75           80
Leu Glu Asp Leu Leu Ala Lys Asp Arg Ser Ile Ser Val Thr Gly Cys
          85           90           95
Ser Leu Gln Met Cys Phe Phe Leu Gly Leu Gly Gly Thr Asn Cys Ile
          100          105          110
Ile Leu Thr Leu Met Gly Tyr Asp Arg Phe Leu Ala Ile Cys Asn Pro
          115          120          125
Leu Arg Tyr Pro Leu Leu Met Thr Asn Ile Val Cys Gly Gln Leu Val
          130          135          140
Ala Ser Ala Cys Thr Ala Gly Phe Phe Ile Ser Leu Thr Glu Thr Ala
145          150          155          160
Leu Ile Phe Arg Asp Ser Phe Cys Arg Pro Asn Leu Val Lys His Phe
          165          170          175
Phe Cys His Met Leu Ala Val Ile Arg Leu Ser Cys Ile Asp Ser Asn
          180          185          190
His Thr Glu Phe Ile Ile Thr Leu Ile Ser Val Ser Gly Leu Leu Gly
          195          200          205
Thr Leu Leu Leu Ile Ile Leu Thr Asp Val Phe Ile Ile Ser Thr Val
          210          215          220
Leu Arg Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Thr Thr Cys
225          230          235          240
Ala Ser His Leu Thr Val Val Ile Ile His Phe Gly Phe Ala Ser Ile
          245          250          255
Val Tyr Leu Lys Pro Glu Ala Ser Gly Asp Asp Thr Leu Ile Ala Val
          260          265          270
Pro Tyr Thr Val Ile Thr Pro Phe Leu Ser Pro Ile Ile Phe Ser Leu
          275          280          285
Arg Asn Lys Asp Met Lys Asn Ala Phe Arg Arg Met Met Gly Asn Thr
          290          295          300
Val Ala Leu Lys Lys Xaa Ile Leu Gly Cys Cys Cys Leu Phe Glu Glu
305          310          315          320
Gly Leu Asn Val Pro
          325

```

<210> 2289

<211> 151

<212> PRT

<213> Homo sapien (8570523-1-20584-21124)

<220>.

<221> VARIANT

<222> (1)...(151)

<223> Xaa = Any Amino Acid

<400> 2289

```

Cys Val Ser Xaa Gln Arg Ser Pro His Phe Leu Cys Ser Gly Asp Ser
 1           5           10           15
Val Phe Cys Leu Val His Ser Val Gly Cys Cys Thr Leu Leu Ser
          20           25           30
Gln Ser Leu Arg Leu Leu Ser Val Phe Leu Leu Ser Ser Cys Ala Ala
          35           40           45
Ser Trp Lys Lys Val His Ser Met Asn Leu Tyr Thr Pro Phe Cys Leu

```

```

      50              55              60
Ser Lys Trp Xaa Asn His Val Asn Asn Ala Phe Asn Leu Pro Ser Trp
65              70              75              80
Lys Lys Ser Lys Ser Val Val Thr Met Phe Xaa Gly Pro Ala Met Ile
      85              90              95
Thr Tyr Leu Arg Ser Asp Ser Xaa Tyr Asn Pro Thr Val Gly Lys Gln
      100              105              110
Leu Val Leu Phe Tyr Ser Ile Val Ser Ala Phe Ile Lys Pro Ile Ile
      115              120              125
Ser Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Ser Trp Lys Val Leu
      130              135              140
Arg Val Lys Gly Thr Ala Gln
145              150

```

<210> 2290

<211> 96

<212> PRT

<213> Homo sapien (8570526-1-82280-82723)

<220>

<221> VARIANT

<222> (1)...(96)

<223> Xaa = Any Amino Acid

<400> 2290

```

Ile Val Val Asp Tyr Leu Ile Ile Lys Ser Ser Ile Phe Pro Pro Ala
1              5              10              15
Asn Ser Asn Leu Phe Lys Leu Ile Arg Lys Ser Ile Pro Ile Leu Ala
      20              25              30
Cys Xaa Arg Val Met Met Asp Leu Gly Xaa Thr Gln Asn Val Ser Thr
      35              40              45
Ser Lys Xaa Gly Cys Val Asp Lys Glu Tyr Asn Cys Phe Ile Pro Phe
      50              55              60
Leu Ile Ala Trp His Leu Xaa His Arg Glu Xaa Arg Ile Ile Xaa Asp
65              70              75              80
Arg Ile Ser Ile Leu Val Xaa Lys Ala Leu Trp Met Lys Asn Lys Gly
      85              90              95

```

<210> 2291

<211> 162

<212> PRT

<213> Homo sapien (8575931-7-5387-5879)

<220>

<221> VARIANT

<222> (1)...(162)

<223> Xaa = Any Amino Acid

<400> 2291

```

Leu Leu Ile Ile Pro Ala Ile Ala Thr Asp Thr Arg Leu Ser Val Leu
1              5              10              15
Val Arg Phe Phe Leu Ala Asn Leu Ala Phe Val Val Thr Cys Phe Thr
      20              25              30
Ser Thr Thr Ile Pro Lys Met Leu Ala Cys Lys Glu Ile Pro Cys Val
      35              40              45
Met Ser Gly Cys Lys Gly Ile Pro Tyr Ala Gly Cys Leu Thr Gln Met
      50              55              60
Leu Phe Phe Ile Trp Leu Gly Ile His Ser Phe Leu Leu Thr Ala Met
65              70              75              80
Ala Asn Glu His Cys Val Ala Ile Cys His Ser Leu Asn Ser Ile Arg
      85              90              95

```


Ser Val Thr Pro Xaa Leu Cys Gly Leu Leu Val Val Ala Ser Trp Thr
 100 105 110
 Phe Ala Phe Arg Asn Ala Leu Thr His Pro Val Leu Leu Thr Arg Leu
 115 120 125
 Ser Leu Cys Thr Tyr Glu Trp Val Ser His Val Phe Cys Asn Leu Ser
 130 135 140
 Gln Leu Leu Lys Leu Ala Cys Ser Asp Ala Thr Leu Asn Asn Val Thr
 145 150 155 160
 Val Gln

<210> 2292

<211> 264

<212> PRT

<213> Homo sapien (8648586-17-1126-4850)

<220>

<221> VARIANT

<222> (1)...(264)

<223> Xaa = Any Amino Acid

<400> 2292

Ala Cys Val Thr Phe Leu Val Glu Val Thr Val Met Pro Phe Ser Thr
 1 5 10 15
 Val Arg Phe Val Lys Ser Cys Trp Tyr Phe Gly Asp Ser Ser Cys Lys
 20 25 30
 Phe Asn Thr Trp Phe Asp Thr Ser Phe Cys Phe Ala Ser Leu Phe His
 35 40 45
 Xaa Gly Cys Ile Ser Val Asp Arg Tyr Met Leu Val Ser Asp Leu Leu
 50 55 60
 Thr Tyr Pro Thr Lys Phe Thr Val Ser Val Leu Gly Ile Cys Met Val
 65 70 75 80
 Leu Cys Trp Phe Leu Phe Cys Pro Tyr Ser Phe Ser Ile Phe Asn Thr
 85 90 95
 Gly Ala Asn Glu Gly Ile Glu Glu Leu Val Val Ala Leu Thr Cys
 100 105 110
 Val Gly Gly Cys Gln Ala Pro Leu Asn Gln Asn Trp Val Leu Leu Cys
 115 120 125
 Phe Leu Leu Phe Phe Ile Pro Asn Val Ala Met Val Phe Ile Tyr Ser
 130 135 140
 Lys Ile Phe Leu Val Ala Lys His Gln Ala Arg Lys Ile Glu Ser Thr
 145 150 155 160
 Ala Ser Gln Ala Gln Ser Ser Ser Glu Ser Tyr Lys Glu Arg Val Ala
 165 170 175
 Lys Arg Glu Arg Lys Ala Ala Lys Thr Leu Gly Ile Ala Met Ala Ala
 180 185 190
 Phe Leu Val Ser Trp Leu Pro Tyr Leu Val Asp Ala Val Ile Asp Ala
 195 200 205
 Tyr Met Asn Phe Ile Thr Pro Pro Tyr Val Tyr Glu Ile Leu Val Trp
 210 215 220
 Cys Val Tyr Tyr Asn Ser Ala Met Asn Pro Leu Ile Tyr Ala Phe Phe
 225 230 235 240
 Tyr Gln Trp Phe Gly Lys Ala Ile Lys Leu Ile Val Ser Gly Lys Val
 245 250 255
 Leu Arg Thr Asp Ser Ser Thr Thr
 260

<210> 2293

<211> 126

<212> PRT

<213> Homo sapien (8648858-36-1-1206)

<220>

<221> VARIANT

<222> (1)...(126)

<223> Xaa = Any Amino Acid

<400> 2293

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Cys | Met | Leu | Cys | Trp | Gln | Trp | Pro | Ala | Val | Met | Thr | Asp | Arg | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ile | Ala | Thr | Cys | Lys | Ser | Arg | His | Phe | Leu | Phe | Leu | Ile | Leu | Val | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Cys | Ser | Leu | Ile | Pro | Ala | Xaa | Ala | Trp | Phe | Thr | Tyr | Phe | Phe | Phe |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Asn | Ser | Lys | Ser | Cys | Val | Val | Leu | Phe | Gln | His | Ile | His | Phe | Cys | Leu |
| | 50 | | | | 55 | | | | | | 60 | | | | |
| Leu | Xaa | Ile | Pro | Ser | Asn | Phe | Tyr | Cys | Leu | Xaa | Thr | Thr | Ala | Tyr | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Lys | Xaa | Leu | Leu | Asn | Met | Xaa | Leu | Lys | His | Xaa | Ile | Lys | Xaa | Thr | Tyr |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Ile | Val | Phe | Leu | Ala | Val | Arg | Ile | Leu | Xaa | Ala | Phe | Leu | Ile | Leu | Ile |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Cys | Ile | Met | Asn | Leu | Gln | Leu | Arg | Gln | Cys | Ala | Thr | His | Phe | | |
| | | 115 | | | | | 120 | | | | | 125 | | | |

<210> 2294

<211> 183

<212> PRT

<213> Homo sapien (8649180-1-4193-6564)

<220>

<221> VARIANT

<222> (1)...(183)

<223> Xaa = Any Amino Acid

<400> 2294

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ile | Met | His | Lys | Lys | Glu | Cys | Xaa | Lys | Lys | Thr | His | Asn | Ile | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Leu | Leu | Met | Val | Trp | Glu | Phe | Phe | Tyr | Lys | Phe | Leu | Val | Phe | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Phe | Ser | Leu | His | Xaa | Cys | Val | Ser | Ser | Ile | Ile | Met | Ser | Val | Tyr |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Tyr | Xaa | Lys | Ile | Asn | Ile | Phe | Ile | Xaa | Ile | Glu | Thr | Lys | Leu | Leu | Phe |
| | 50 | | | | 55 | | | | | | 60 | | | | |
| His | Ile | Ser | Arg | Xaa | Asp | Arg | Met | Ile | Arg | Cys | Ser | Phe | Gln | Lys | Asn |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Tyr | Leu | Leu | Asn | His | Asn | Gly | Leu | Met | Cys | Arg | Ser | Lys | Cys | Gln | Leu |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Val | Tyr | Gln | Thr | Val | Ser | Asn | Ser | Leu | Asn | Tyr | Phe | Tyr | Ile | Thr | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ile | Xaa | Leu | Phe | Gln | Ile | Val | Val | Tyr | Lys | Lys | Tyr | Lys | Phe | Leu | His |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Cys | Ile | Val | Leu | Asp | Val | Pro | Ala | Tyr | Ile | Asn | Ile | Leu | Gly | Cys | Ile |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Ser | Phe | Leu | His | Val | Ile | Cys | Asn | Val | Xaa | Leu | Tyr | Val | Ile | Asn |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Lys | Thr | Xaa | Asn | Xaa | Tyr | Lys | Ser | Arg | Phe | Ser | Thr | Cys | Leu | Ser | His |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Ser | Asp | Ile | Thr | Asp | Leu | Phe | | | | | | | | | |
| | | | 180 | | | | | | | | | | | | |

<210> 2295

<211> 157
 <212> PRT
 <213> Homo sapien (902315-1-1-472)

<400> 2295
 Ile Cys His Pro Leu Gln Tyr Thr Ile Leu Met Asn Pro Glu Leu Cys
 1 5 10 15
 Val Phe Met Thr Val Ala Ser Trp Thr Leu Gly Ser Leu Asp Gly Ile
 20 25 30
 Ile Val Leu Ala Ala Val Leu Ser Phe Ser Tyr Cys Ser Ser Leu Glu
 35 40 45
 Ile His His Phe Phe Cys Asp Val Ala Ala Leu Leu Pro Leu Ser Cys
 50 55 60
 Thr Glu Thr Ser Ala Phe Glu Arg Leu Leu Val Ile Cys Cys Val Val
 65 70 75 80
 Met Leu Ile Phe Pro Val Ser Val Ile Ile Leu Ser Tyr Ser His Val
 85 90 95
 Leu Arg Ala Val Ile His Met Gly Ser Gly Glu Ser Arg Arg Lys Ala
 100 105 110
 Phe Thr Thr Cys Ser Ser His Pro Ser Val Val Gly Leu Tyr Tyr Gly
 115 120 125
 Ala Ala Met Phe Met Tyr Met Arg Pro Ala Ser Lys His Thr Pro Asp
 130 135 140
 Gln Asp Lys Met Val Ser Ala Phe Tyr Thr Asn Pro Ala
 145 150 155

<210> 2296
 <211> 325
 <212> PRT
 <213> Mus musculus (M1 4726083-1-12568-18197 3361-4335)

<220>
 <221> VARIANT
 <222> (1)...(325)
 <223> Xaa = Any Amino Acid

<400> 2296
 Thr Met Trp Ser Asn Ile Ser Ala Ala Pro Phe Leu Leu Thr Gly Phe
 1 5 10 15
 Pro Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala
 20 25 30
 Ile Tyr Ile Ser Val Leu Leu Gly Asn Gly Thr Leu Leu Tyr Leu Ile
 35 40 45
 Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met
 50 55 60
 Leu Ala Gly Thr Asp Leu Thr Val Thr Leu Thr Thr Met Pro Thr Val
 65 70 75 80
 Met Ala Val Leu Trp Val Asn His Arg Glu Ile Arg His Gly Ala Cys
 85 90 95
 Phe Leu Gln Ala Tyr Ile Ile His Ser Leu Ser Ile Val Glu Ser Gly
 100 105 110
 Val Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro
 115 120 125
 Leu His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Ile Ala Ile Gly
 130 135 140
 Leu Gly Val Val Leu Arg Gly Phe Leu Ser Leu Val Pro Pro Ile Leu
 145 150 155 160
 Pro Leu Phe Trp Phe Ser Tyr Cys Arg Ser His Val Leu Ser His Ala
 165 170 175
 Phe Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr
 180 185 190

Phe Asn Arg Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu
 195 200 205
 Asp Ala Leu Ile Ile Val Phe Ser Tyr Val Leu Ile Leu Lys Thr Val
 210 215 220
 Met Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys
 225 230 235 240
 Val Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly
 245 250 255
 Leu Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His
 260 265 270
 Ile Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro
 275 280 285
 Ile Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Val Leu His
 290 295 300
 Leu Leu Ser Val Xaa Asp Val Asn His Tyr Ile Ile Ile Gln Arg
 305 310 315 320
 Ser Leu Gly Met Phe
 325

<210> 2297

<211> 318

<212> PRT

<213> Mus musculus (M2 4726083-1-175-4296 2476-1523)

<400> 2297

Leu Ser Ala Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe
 1 5 10 15
 Leu Leu Thr Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser
 20 25 30
 Leu Pro Leu Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr
 35 40 45
 Leu Leu Phe Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr
 50 55 60
 Tyr Phe Leu Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr
 65 70 75 80
 Thr Met Pro Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile
 85 90 95
 Gly His Gly Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser
 100 105 110
 Ile Val Glu Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile
 115 120 125
 Ala Ile Arg Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Thr Lys
 130 135 140
 Val Ile Lys Ile Gly Ile Gly Leu Val Met Arg Ala Gly Leu Ser Ile
 145 150 155 160
 Met Pro Ile Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His
 165 170 175
 Val Leu Ser His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala
 180 185 190
 Cys Ala Asp Ile Thr Phe Asn Arg Leu Tyr Pro Val Val Val Phe
 195 200 205
 Ala Met Val Leu Leu Asp Phe Leu Ile Ile Phe Phe Ser Tyr Val Leu
 210 215 220
 Ile Leu Lys Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys
 225 230 235 240
 Ala Leu Asn Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr
 245 250 255
 Val Thr Val Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Val
 260 265 270
 Pro His Val Val His Ile Thr Met Ser Tyr Ile Tyr Phe Leu Phe Pro
 275 280 285

Pro Phe Met Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln
 290 295 300
 Ser Gly Leu Leu Arg Leu Phe Ser Leu Pro Cys Ser Lys Thr
 305 310 315

<210> 2298

<211> 351

<212> PRT

<213> Mus musculus (M3 4726083-1-26023-28273 267-1318)

<220>

<221> VARIANT

<222> (1)...(351)

<223> Xaa = Any Amino Acid

<400> 2298

Leu Ser Pro Ser Leu Lys Pro Ser Cys Asn Cys Asp Pro Thr Met Trp
 1 5 10 15
 Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu Gly Leu
 20 25 30
 Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile Tyr Phe
 35 40 45
 Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp Ser Asp
 50 55 60
 His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu Ala Ser
 65 70 75 80
 Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu Gly Val
 85 90 95
 Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe Ile Gln
 100 105 110
 Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val Leu Leu
 115 120 125
 Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu His Tyr
 130 135 140
 Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu Gly Ala
 145 150 155 160
 Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro Leu Phe
 165 170 175
 Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe Cys Leu
 180 185 190
 His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe Asn Leu
 195 200 205
 Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp Ala Leu
 210 215 220
 Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met Gly Ile
 225 230 235 240
 Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val Ser His
 245 250 255
 Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu Thr Phe
 260 265 270
 Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile Thr Met
 275 280 285
 Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr
 290 295 300
 Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu Leu Ser
 305 310 315 320
 Lys His Ser Arg Thr Xaa Ile Leu Ile Ile Asp Ser Gln Val Leu Tyr
 325 330 335
 Tyr Phe Trp Pro Phe Ile Arg Asn Lys Ser Cys Leu Lys Xaa Tyr
 340 345 350

<210> 2299
 <211> 339
 <212> PRT
 <213> Mus musculus (M4 4761596-1-24347-28106 1259-2275)

<220>
 <221> VARIANT
 <222> (1)...(339)
 <223> Xaa = Any Amino Acid

<400> 2299
 Ala Ser Ser Phe His Asn Asp Thr Asn Pro Gln Asp Val Trp Tyr Val
 1 5 10 15
 Leu Ile Gly Ile Pro Gly Leu Glu Asp Leu His Ser Trp Ile Ala Ile
 20 25 30
 Pro Ile Cys Ser Met Tyr Ile Val Ala Val Ile Gly Asn Val Leu Leu
 35 40 45
 Ile Phe Leu Ile Val Thr Glu Arg Ser Leu His Glu Pro Met Tyr Phe
 50 55 60
 Phe Leu Ser Met Leu Ala Leu Ala Asp Leu Leu Leu Ser Thr Ala Thr
 65 70 75 80
 Ala Pro Lys Met Leu Ala Ile Phe Trp Phe His Ser Arg Gly Ile Ser
 85 90 95
 Phe Gly Ser Cys Val Ser Gln Met Phe Phe Ile His Phe Ile Phe Val
 100 105 110
 Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala
 115 120 125
 Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ser Ser Val Ile
 130 135 140
 Gly Lys Ile Gly Thr Ala Val Val Arg Ser Phe Leu Ile Cys Phe
 145 150 155 160
 Pro Phe Ile Phe Leu Val Tyr Arg Leu Leu Tyr Cys Gly Lys His Ile
 165 170 175
 Ile Pro His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys
 180 185 190
 Asp Asn Ile Thr Val Asn Ile Ile Tyr Gly Leu Thr Met Ala Leu Leu
 195 200 205
 Ser Thr Gly Leu Asp Ile Leu Leu Ile Ile Ile Ser Tyr Thr Met Ile
 210 215 220
 Leu Arg Thr Val Phe Gln Ile Pro Ser Trp Ala Ala Arg Tyr Lys Ala
 225 230 235 240
 Leu Asn Thr Cys Gly Ser His Ile Cys Val Ile Leu Leu Phe Tyr Thr
 245 250 255
 Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly Lys Thr Val
 260 265 270
 Pro Arg His Ile His Ile Leu Val Ala Asn Leu Tyr Val Val Val Pro
 275 280 285
 Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gln
 290 295 300
 Asp Arg Val Val Phe Leu Phe Ser Ser Val Ser Thr Cys Gln His Asp
 305 310 315 320
 Ser Arg Cys Xaa Arg Xaa His Ile Pro Lys Glu Asn Ser Phe Lys Cys
 325 330 335
 His Pro Cys

<210> 2300
 <211> 344
 <212> PRT
 <213> Mus musculus (M5 4761596-1-36028-37764 563-1594)

<220>

<221> VARIANT

<222> (1)...(344)

<223> Xaa = Any Amino Acid

<400> 2300

```

Ile Ser Glu Leu Thr Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro
 1           5           10           15
Ser Val Leu Thr Leu Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys
      20           25           30
Trp Ile Gly Ile Pro Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly
      35           40           45
Asn Ser Leu Ile Leu Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile
      50           55           60
Pro Met Tyr Ile Phe Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu
      65           70           75           80
Ser Thr Cys Ile Leu Pro Lys Met Leu Gly Ile Phe Trp Phe His Met
      85           90           95
Pro Gln Ile Ser Phe Asp Ala Cys Leu Leu Gln Met Glu Leu Ile His
      100          105          110
Ser Phe Gln Ala Thr Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp
      115          120          125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser
      130          135          140
Pro Gln Leu Thr Thr Cys Leu Gly Ala Gly Ala Leu Leu Arg Ala Phe
      145          150          155          160
Ile Leu Val Ser Pro Ser Ile Leu Leu Ile Lys Cys Arg Leu Lys Tyr
      165          170          175
Phe Arg Thr Thr Ile Ile Ser His Ser Tyr Cys Glu His Met Ala Ile
      180          185          190
Val Lys Leu Ala Ala Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu
      195          200          205
Leu Val Ala Phe Ala Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe
      210          215          220
Ser Tyr Val Arg Ile Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu
      225          230          235          240
Ala Arg Phe Lys Ala Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe
      245          250          255
Leu Gln Phe Tyr Leu Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe
      260          265          270
Gly Ala His Ile Pro Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr
      275          280          285
Leu Leu Val Pro Pro Phe Leu Asn Pro Ile Val Tyr Gly Val Lys Thr
      290          295          300
Lys Gln Ile Arg Asp Gln Val Leu Lys Met Leu Phe Ser Lys Lys Pro
      305          310          315          320
Leu Val Ser Leu Ser Val Glu Lys Leu Cys Gly Phe Xaa Xaa Gln Leu
      325          330          335
Xaa Xaa Val Lys Leu Phe Ile Phe
      340

```

<210> 2301

<211> 347

<212> PRT

<213> Mus musculus (M6 4761596-1-45918-48570 619-1659)

<220>

<221> VARIANT

<222> (1)...(347)

<223> Xaa = Any Amino Acid

<400> 2301

```

Thr Gly Arg Phe Ser Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro
1          5          10          15
Ser Val Leu Thr Leu Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys
20          25          30
Trp Ile Gly Ile Pro Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly
35          40          45
Asn Ser Leu Ile Leu Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile
50          55          60
Pro Met Tyr Ile Phe Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu
65          70          75          80
Ser Thr Cys Ile Leu Pro Lys Met Leu Gly Ile Phe Trp Phe His Met
85          90          95
Pro Gln Ile Ser Phe Asp Ala Cys Leu Leu Gln Met Glu Leu Ile His
100          105          110
Ser Phe Gln Ala Thr Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp
115          120          125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser
130          135          140
Pro Gln Leu Thr Thr Cys Leu Gly Ala Gly Ala Leu Leu Arg Ser Leu
145          150          155          160
Ile Thr Thr Phe Pro Leu Ile Leu Leu Ile Lys Phe Cys Leu Lys Tyr
165          170          175
Phe Arg Thr Thr Ile Ile Ser His Ser Tyr Cys Glu His Met Ala Ile
180          185          190
Val Lys Leu Ala Ala Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu
195          200          205
Leu Val Ala Phe Ala Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe
210          215          220
Ser Tyr Val Arg Ile Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu
225          230          235          240
Ala Arg Phe Lys Ala Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe
245          250          255
Leu Gln Phe Tyr Leu Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe
260          265          270
Gly Ala His Ile Pro Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr
275          280          285
Leu Leu Val Pro Pro Phe Leu Asn Pro Ile Val Tyr Gly Ile Lys Thr
290          295          300
Lys Gln Ile Arg Asp Gln Val Leu Lys Met Phe Phe Ser Lys Lys Pro
305          310          315          320
Leu Xaa Thr Ser Val Thr Arg Ser Val Glu Lys Leu Cys Gly Phe Xaa
325          330          335
Leu Glu Leu Glu Xaa Val Lys Pro Xaa Ile Phe
340          345

```

<210> 2302

<211> 351

<212> PRT

<213> Mus musculus (M7 5051393-1-104482-107691 2444-1393)

<220>

<221> VARIANT

<222> (1)...(351)

<223> Xaa = Any Amino Acid

<400> 2302

```

Val Leu Cys Thr Thr Leu Ser Xaa Gln Ser His Ser Ser Asn Xaa Ile
1          5          10          15
Gln Met Thr Met Val Asn Gln Ser Thr Pro Val Gly Phe Leu Leu Leu
20          25          30

```


Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Val
 35 40 45
 Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu
 50 55 60
 Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu
 65 70 75 80
 Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro
 85 90 95
 Gln Met Leu Phe Asn Leu Trp Gly Pro Thr Lys Thr Ile Ser Phe Leu
 100 105 110
 Gly Cys Ser Val Gln Leu Phe Ile Phe Met Leu Leu Gly Thr Thr Glu
 115 120 125
 Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys
 130 135 140
 Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Arg Gln
 145 150 155 160
 Leu Ala Gly Val Ala Trp Ala Ile Gly Leu Val Gln Ser Ile Val Gln
 165 170 175
 Ile Pro Pro Thr Leu Thr Leu Pro Phe Cys Ser His Arg Gln Ile Asp
 180 185 190
 Asp Phe Leu Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Cys Gly Asp
 195 200 205
 Thr Thr Phe Asn Glu Ile Gln Leu Ser Val Ala Gly Val Ile Phe Leu
 210 215 220
 Leu Val Pro Leu Ser Leu Ile Ile Val Ser Tyr Gly Val Ile Ala Arg
 225 230 235 240
 Ala Val Leu Lys Thr Asn Ser Ser Lys Gly Arg Arg Lys Ala Phe Gly
 245 250 255
 Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val
 260 265 270
 Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg Ser
 275 280 285
 Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro
 290 295 300
 Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Trp Arg
 305 310 315 320
 Leu Leu Gly Lys Asp Ala Ala Ser Gly Arg Asn Xaa Gly Gln Ile Leu
 325 330 335
 Val Xaa Phe Leu Asn Tyr Lys Val Ser Ser Xaa Tyr Val Tyr Cys
 340 345 350

<210> 2303

<211> 320

<212> PRT

<213> Mus musculus (M8 5051393-1-124150-125858 1430-472)

<220>

<221> VARIANT

<222> (1)...(320)

<223> Xaa = Any Amino Acid

<400> 2303

Arg Leu Asp Thr Glu Ile Met Val Asn Gln Ser Ser Pro Val Val Phe
 1 5 10 15
 Phe Leu Leu Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Phe
 20 25 30
 Val Val Val Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu
 35 40 45
 Ile Leu Leu Leu Ser Thr Leu Asp Pro Arg Leu His Thr Pro Met Tyr
 50 55 60
 Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | 80 |
| Cys | Val | Pro | Gln | Met | Leu | Phe | Asn | Leu | Trp | Gly | Pro | Glu | Lys | Thr |
| | | | | 85 | | | | | 90 | | | | | 95 |
| Ser | Phe | Leu | Gly | Cys | Phe | Val | Xaa | Leu | Phe | Ile | Phe | Met | Ser | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | |
| Thr | Thr | Glu | Cys | Ile | Leu | Leu | Thr | Val | Met | Ala | Phe | Asp | Arg | Tyr |
| | | | 115 | | | | 120 | | | | | 125 | | |
| Ala | Val | Cys | Gln | Pro | Leu | His | Tyr | Ala | Thr | Val | Ile | Asn | Pro | Arg |
| | | | 130 | | | 135 | | | | | 140 | | | |
| Cys | Gln | Gln | Leu | Ala | Gly | Ile | Ala | Trp | Ala | Ile | Gly | Leu | Val | Gln |
| 145 | | | | | 150 | | | | 155 | | | | | 160 |
| Ile | Val | Gln | Thr | Pro | Pro | Thr | Leu | Lys | Leu | Pro | Phe | Cys | Ser | His |
| | | | | 165 | | | | 170 | | | | | | 175 |
| Gln | Ile | Asp | Asn | Phe | Val | Cys | Glu | Val | Pro | Ser | Leu | Ile | Gln | Leu |
| | | | 180 | | | | 185 | | | | | | 190 | |
| Cys | Gly | Asp | Ile | Thr | Tyr | Asn | Glu | Ile | Gln | Met | Ala | Val | Ala | Ser |
| | | 195 | | | | 200 | | | | | 205 | | | |
| Phe | Ile | Val | Val | Val | Pro | Leu | Ser | Leu | Ile | Leu | Val | Ser | Tyr | Gly |
| | | 210 | | | | 215 | | | | | 220 | | | |
| Ile | Ala | Arg | Ala | Val | Leu | Lys | Ile | Ser | Ser | Ala | Lys | Gly | Arg | Arg |
| 225 | | | | | 230 | | | | | 235 | | | | 240 |
| Ala | Phe | Gly | Thr | Cys | Ser | Ser | His | Leu | Ile | Val | Val | Thr | Leu | Phe |
| | | | | 245 | | | | 250 | | | | | | 255 |
| Ser | Ser | Val | Ile | Ala | Val | Tyr | Leu | Gln | Pro | Lys | Asn | Pro | Tyr | Ala |
| | | 260 | | | | | 265 | | | | | 270 | | |
| Glu | Arg | Gly | Lys | Phe | Phe | Gly | Leu | Phe | Tyr | Ala | Val | Gly | Thr | Pro |
| | | 275 | | | | 280 | | | | | | 285 | | |
| Leu | Asn | Pro | Leu | Val | Tyr | Thr | Leu | Arg | Asn | Lys | Glu | Val | Lys | Arg |
| | 290 | | | | | 295 | | | | 300 | | | | |
| Phe | Trp | Lys | Leu | Leu | Arg | Lys | Asp | Glu | Asp | Ser | Glu | Glu | Ser | Trp |
| 305 | | | | | 310 | | | | 315 | | | | | 320 |

<210> 2304

<211> 317

<212> PRT

<213> Mus musculus (M9 5051393-1-149569-151395 1755-805)

<220>

<221> VARIANT

<222> (1)...(317)

<223> Xaa = Any Amino Acid

<400> 2304

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Gln | Ala | Asn | His | Ser | Ser | Ala | Glu | Arg | Phe | Leu | Leu | Leu | Gly | Phe |
| 1 | | | 5 | | | | | 10 | | | | | | 15 | |
| Ser | Asp | Trp | Pro | Ser | Leu | Gln | Pro | Val | Leu | Phe | Ala | Leu | Val | Leu | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Cys | Tyr | Leu | Leu | Thr | Leu | Thr | Gly | Asn | Ala | Ala | Leu | Val | Leu | Leu | Ala |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ile | Arg | Asp | Pro | Arg | Leu | His | Thr | Pro | Met | Tyr | Tyr | Phe | Leu | Cys | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Ala | Leu | Val | Asp | Val | Gly | Phe | Thr | Thr | Ser | Val | Val | Pro | Pro | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Ala | Ser | Leu | Arg | Gly | Ser | Met | Leu | Gln | Leu | Pro | Arg | Ala | Gly | Cys |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Met | Ala | Gln | Leu | Cys | Ser | Ser | Leu | Ala | Leu | Gly | Ser | Ala | Glu | Cys | Val |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Leu | Ala | Val | Met | Ala | Leu | Asp | Arg | Ala | Ala | Ala | Val | Cys | Asn | Pro |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Arg | Tyr | Thr | Ser | Leu | Ala | Ser | Pro | Leu | Leu | Cys | Arg | Thr | Leu | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |

Gly Val Ser Trp Leu Gly Gly Leu Ala Asn Ser Ala Ala Gln Thr Ala
 145 150 155 160
 Leu Leu Ala Ala Arg Pro Leu Cys Ala Pro Arg Cys Leu Asp His Phe
 165 170 175
 Ile Cys Glu Leu Pro Ala Leu Leu Gln Leu Ala Cys Arg Gly Gly Arg
 180 185 190
 Ser Ala Thr Glu Arg Gln Met Phe Ala Ala Arg Val Val Ile Leu Leu
 195 200 205
 Val Pro Ser Ala Val Ile Leu Ala Ser Tyr Ile Ala Val Gly Arg Ala
 210 215 220
 Val Trp Gly Met His Ser Ser Ser Gly Trp Arg Lys Ala Ala Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Thr Ala Val Cys Leu Phe Tyr Gly Ser Ala Thr
 245 250 255
 Tyr Thr Tyr Leu Gln Pro Thr His Ser Tyr Asn Gln Gly Arg Gly Lys
 260 265 270
 Phe Val Ser Leu Phe Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
 275 280 285
 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Ala Leu Arg Leu
 290 295 300
 Leu Arg Ser Leu Gly Arg Pro Xaa Val Gly Gln Xaa Lys
 305 310 315

<210> 2305

<211> 348

<212> PRT

<213> Mus musculus (M10 5051393-1-39874-41685 1277-235)

<220>

<221> VARIANT

<222> (1)...(348)

<223> Xaa = Any Amino Acid

<400> 2305

Val Leu Cys Thr Thr Leu Ser Xaa Gln Ser His Pro Ser Asn Xaa Ile
 1 5 10 15
 Gln Met Thr Met Val Asn Gln Ser Ser Pro Val Gly Phe Leu Leu Leu
 20 25 30
 Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Ile Val Val Val
 35 40 45
 Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu
 50 55 60
 Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu
 65 70 75 80
 Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro
 85 90 95
 Gln Met Leu Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu
 100 105 110
 Gly Cys Phe Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu
 115 120 125
 Cys Ile Leu Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys
 130 135 140
 Gln Pro Leu His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Cys Gln
 145 150 155 160
 Leu Ala Ala Val Ala Cys Thr Ile Gly Leu Val Glu Ser Val Val Gln
 165 170 175
 Thr Pro Ser Thr Leu Arg Leu Pro Phe Cys Pro His His Gln Val Asp
 180 185 190
 Asp Phe Val Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Gly Asp
 195 200 205
 Thr Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Val Phe Ile Leu

| | | |
|---|---|-----|
| 210 | 215 | 220 |
| Val Val Pro Leu Ser Leu | Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg | |
| 225 | 230 | 235 |
| Ala Val Leu Arg Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly | | 240 |
| | 245 | 250 |
| Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val | | 255 |
| | 260 | 265 |
| Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly | | 270 |
| | 275 | 280 |
| Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro | | 285 |
| | 290 | 295 |
| Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Arg Arg | | 300 |
| 305 | 310 | 315 |
| Leu Leu Trp Lys Glu Val Lys Pro Ser Xaa His Thr Leu Ser Lys Leu | | 320 |
| | 325 | 330 |
| Asn Gly Lys Ser Ala Cys Leu Val Gly Leu Ser Phe | | 335 |
| | 340 | 345 |

<210> 2306

<211> 347

<212> PRT

<213> Mus musculus (M11 5051393-1-46409-49345 2458-1419)

<220>

<221> VARIANT

<222> (1)...(347)

<223> Xaa = Any Amino Acid

<400> 2306

| | |
|---|-----|
| Cys Pro Lys Ser Thr Thr Ser Gly His Ile Glu Ser Cys Met Gly Gln | |
| 1 | 5 |
| Tyr Phe Gln Leu Asp Ser Xaa Gln Lys Gln Thr Met Val Asn Gln Ser | |
| | 20 |
| Ser Pro Val Gly Phe Leu Leu Leu Gly Phe Ser Glu His Pro Gln Leu | |
| | 35 |
| Glu Lys Val Leu Phe Val Ile Val Leu Cys Ser Tyr Leu Leu Thr Leu | |
| 50 | 55 |
| Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr Leu Asp Pro Arg Leu | |
| 65 | 70 |
| His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu | |
| | 85 |
| Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu Phe Asn Leu Trp Gly | |
| | 100 |
| Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Ser Val Gln Leu Phe Ile | |
| | 115 |
| Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu Leu Thr Val Met Ser | |
| | 130 |
| Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Val | |
| 145 | 150 |
| Ile His Pro Arg Leu Cys Trp Lys Leu Ala Val Ala Trp Met Met | |
| | 165 |
| Gly Leu Leu Gln Ser Ile Val Gln Thr Pro Pro Thr Leu Lys Leu Pro | |
| | 180 |
| Phe Cys Pro His Arg Gln Ile Asp Asp Phe Leu Cys Glu Val Pro Ser | |
| | 195 |
| Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Phe Asn Glu Ile Gln Leu | |
| | 210 |
| Ala Val Ser Ser Val Ile Leu Val Val Val Pro Leu Ser Leu Ile Leu | |
| 225 | 230 |
| Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Met Arg Ile Asn Ser Thr | |
| | 245 |

Glu Ala Trp Lys Lys Ala Leu Arg Thr Cys Ser Ser His Leu Ile Val
 260 265 270
 Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val Tyr Leu Gln Pro Lys
 275 280 285
 Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe Gly Leu Phe Tyr Ala
 290 295 300
 Val Gly Thr Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys
 305 310 315 320
 Glu Val Lys Arg Ala Phe Trp Arg Leu Leu Gly Lys Asp Gly Asp Ser
 325 330 335
 Lys Asn Thr Xaa Glu Ile Asn Ser Arg Arg Thr
 340 345

<210> 2307

<211> 326

<212> PRT

<213> Mus musculus (M12 5051393-1-65471-67664 1437-460)

<220>

<221> VARIANT

<222> (1)...(326)

<223> Xaa = Any Amino Acid

<400> 2307

Leu Asp Thr Glu Ile Met Val Asn Gln Ser Ser Pro Val Val Phe Phe
 1 5 10 15
 Leu Leu Gly Phe Ser Glu His Pro Gln Leu Lys Lys Val Leu Phe Val
 20 25 30
 Val Val Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile
 35 40 45
 Leu Leu Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe
 50 55 60
 Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys
 65 70 75 80
 Val Pro Gln Met Leu Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser
 85 90 95
 Phe Leu Gly Cys Phe Val Gln Leu Phe Ile Phe Met Ser Leu Gly Thr
 100 105 110
 Thr Glu Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala
 115 120 125
 Val Cys Gln Pro Leu His Tyr Ala Thr Lys Ile Asn Pro His Leu Cys
 130 135 140
 Arg Gln Leu Ala Gly Ile Ala Trp Ala Ile Gly Leu Val Gln Ser Ile
 145 150 155 160
 Val Gln Thr Pro Pro Thr Leu Lys Leu Pro Phe Cys Ser His Arg Gln
 165 170 175
 Ile Asp Asn Phe Leu Cys Glu Val Pro Ser Leu Ile Gln Leu Ser Cys
 180 185 190
 Gly Asp Thr Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Ile Phe
 195 200 205
 Ile Val Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile
 210 215 220
 Ala Arg Ala Val Leu Lys Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala
 225 230 235 240
 Phe Gly Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser
 245 250 255
 Ser Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu
 260 265 270
 Arg Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu
 275 280 285
 Asn Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe

| | | | | |
|---|--|-----|--|-----|
| 290 | | 295 | | 300 |
| Trp Lys Leu Leu Arg Lys Asp Glu Asp Ser Glu Glu Ser Xaa Arg Arg | | | | |
| 305 | | 310 | | 315 |
| Asn Thr Xaa His Thr Phe | | | | 320 |
| | | 325 | | |

<210> 2308

<211> 282

<212> PRT

<213> Mus musculus (M13 6143913-1-1-2867 848-3)

<400> 2308

| | |
|---|--|
| Leu Ile Ile Tyr Cys Leu Phe Leu Ser Phe Pro Gly Ile Met Asp His | |
| 1 5 10 15 | |
| Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly Phe Thr Thr | |
| 20 25 30 | |
| Ser Gly Thr Leu Gln His Leu Ala Val Phe Gly Thr Leu Cys Ile Tyr | |
| 35 40 45 | |
| Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu Val Gln Ala | |
| 50 55 60 | |
| Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser Val Leu Ser | |
| 65 70 75 80 | |
| Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr Leu Leu His | |
| 85 90 95 | |
| Thr Leu Leu His Gly Pro Ser Pro Ile Pro Ser Ser Ala Cys Phe Val | |
| 100 105 110 | |
| Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys Tyr Leu Leu | |
| 115 120 125 | |
| Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His | |
| 130 135 140 | |
| Tyr His Ala Leu Met Ser Arg Gln Val Gln Lys Gln Leu Val Gly Val | |
| 145 150 155 160 | |
| Thr Trp Leu Ala Gly Phe Ser Ala Ala Leu Val Pro Ala Gly Leu Thr | |
| 165 170 175 | |
| Ala Ser Leu Pro Tyr Cys Leu Lys Glu Val Ala His Tyr Phe Cys Asp | |
| 180 185 190 | |
| Leu Ala Pro Val Met Gln Leu Ala Cys Val Asp Thr Ser Trp His Ala | |
| 195 200 205 | |
| Arg Leu Tyr Ile Ala Val Ile Gly Met Ile Asn Thr Cys Asn Leu Thr | |
| 210 215 220 | |
| Phe Ile Leu Gly Leu Tyr Gly Gly Ile Val Arg Ala Val Leu Lys Leu | |
| 225 230 235 240 | |
| Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His | |
| 245 250 255 | |
| Ile Thr Val Val Thr Leu Phe Phe Gly Ser Ala Phe Ile Val Tyr Val | |
| 260 265 270 | |
| Gly Pro Pro Glu Ile Arg Ala Glu Gly Arg | |
| 275 280 | |

<210> 2309

<211> 333

<212> PRT

<213> Mus musculus (M14 6143913-1-6180-10825 2950-1952)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

<400> 2310

Leu Leu Leu Gly Thr Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr

```

1           5           10           15
Phe Ile Leu Ala Gly Phe Thr Thr Ser Gly Ala Leu Arg Pro Leu Ala
      20           25           30
Phe Leu Gly Thr Leu Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu
      35           40           45
Phe Ile Ile Val Leu Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met
      50           55           60
Tyr Phe Phe Ile Ser Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser
      65           70           75           80
Thr Thr Val Pro Thr Leu Leu His Thr Leu Leu His Gly His Ser Pro
      85           90           95
Ile Pro Ser Ser Ala Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu
      100          105          110
Gly Met Thr Glu Cys Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr
      115          120          125
Leu Ala Ile Cys Arg Pro Leu His Tyr His Ala Leu Met Ser Lys Gln
      130          135          140
Val Gln Leu Trp Leu Ala Gly Ala Thr Trp Val Ala Gly Phe Ser Ala
      145          150          155          160
Ala Leu Val Pro Ala Cys Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys
      165          170          175
Glu Ile Ala His Tyr Phe Cys Asp Leu Ala Pro Leu Met Arg Leu Ala
      180          185          190
Cys Val Ser Thr Arg Trp His Ala Arg Val His Gly Ala Val Ile Gly
      195          200          205
Val Ala Thr Gly Cys Asn Phe Val Leu Ile Leu Gly Leu Tyr Gly Gly
      210          215          220
Ile Leu Thr Ala Val Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys
      225          230          235          240
Ala Phe Ser Thr Cys Ser Ser His Met Thr Val Val Ala Leu Phe Tyr
      245          250          255
Ala Ser Ala Phe Thr Val Tyr Val Gly Ser Pro Gln Ser Arg Pro Glu
      260          265          270
Gly Thr Asp Lys Leu Ile Ala Leu Val Tyr Ala Leu Leu Thr Pro Phe
      275          280          285
Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala
      290          295          300
Val Lys Arg Val Ser Glu Lys Ile Arg Thr Leu Leu Arg Asp Thr Xaa
      305          310          315          320
Leu Ser Leu Leu Thr Leu Pro Thr Phe Arg Val Asn Ala
      325          330

```

<210> 2311

<211> 120

<212> PRT

<213> Mus musculus (M15 6143913-1-66312-67763 687-330)

<220>

<221> VARIANT

<222> (1)...(120)

<223> Xaa = Any Amino Acid

<400> 2311

```

Val Thr Val Gly His Cys Leu Gly Gln Met Ser Leu Ser Val Asp Thr
1           5           10           15
Asp Phe Leu Ile Glu Phe Phe Cys Leu Lys Arg Lys Glu Lys Lys Arg
      20           25           30
Lys Lys Lys Asp Cys Ser Pro Leu Tyr Leu Asp Ser Xaa Phe Gln Ser
      35           40           45
His Glu Ile Thr Gly Ser Phe Ser Phe Ser Val Phe His Arg Ser Leu
      50           55           60

```

Leu Ser Asn Ile Ser Leu Gln Met Met Ala Tyr Phe Gln Ile Thr Leu
 65 70 75 80
 Pro Ser Thr Phe Cys Ile Pro Xaa Gln Arg Ser Gln Thr Ser Ala Cys
 85 90 95
 Ile Tyr Val Leu Asn Asn Leu Leu Ser Leu Phe His Ser Leu Ile Ser
 100 105 110
 Ser Leu Xaa Pro Thr Ala Ser Thr
 115 120

<210> 2312

<211> 323

<212> PRT

<213> Mus musculus (M16 6456795-1-106495-108409 847-1815)

<400> 2312

Leu Ser Ser Tyr Gln Phe Leu Leu Glu Lys Lys Arg Pro Ile Met Asn
 1 5 10 15
 Cys Ser Lys Thr Pro Gly Phe Ile Leu Leu Gly Leu Ser Ser Asp Pro
 20 25 30
 Glu Lys Trp Gln Pro Leu Phe Asn Ile Phe Leu Cys Leu Tyr Leu Leu
 35 40 45
 Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr Asp Val
 50 55 60
 His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Val
 65 70 75 80
 Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu Ala Leu
 85 90 95
 Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln Phe
 100 105 110
 Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu Ala Val
 115 120 125
 Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Phe Tyr Pro
 130 135 140
 Phe Leu Met Thr Pro Cys Arg Cys Glu Val Leu Ala Ser Gly Ser Trp
 145 150 155 160
 Gly Ile Ala His Cys Val Ser Leu Phe Tyr Thr Leu Leu Leu Ser Gln
 165 170 175
 Phe Tyr Tyr His Thr Asn Gln Gly Ile Pro His Phe Phe Cys Asp Ser
 180 185 190
 Arg Pro Leu Leu Leu Leu Ser Cys Ser Asp Thr His Leu Ser Glu Gly
 195 200 205
 Leu Met Met Ala Leu Ser Gly Val Leu Gly Met Ser Ser Val Leu Cys
 210 215 220
 Leu Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg Val Pro
 225 230 235 240
 Ser Ala Gln Gly Lys Arg Lys Ser Leu Ala Thr Cys Ser Ser His Leu
 245 250 255
 Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu Lys
 260 265 270
 Pro Pro Ser Thr Ser His Ser Ser Ala Glu Val Val Ala Ala Val Met
 275 280 285
 Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu Arg
 290 295 300
 Asn Lys Asp Val Lys Ser Ser Leu Arg Lys Ile Leu Asn Met Asp Lys
 305 310 315 320
 Phe Gln Gly

<210> 2313

<211> 284

<212> PRT

<213> Mus musculus (M17 6456795-1-108765-110526 1744-894)

<220>

<221> VARIANT

<222> (1)...(284)

<223> Xaa = Any Amino Acid

<400> 2313

```

Cys Ile Tyr Ile Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val
 1           5           10          15
Cys Ile Ser Ile Cys Thr Tyr Leu His Ile Xaa Ile His Met Cys Val
          20          25          30
Gln Val Val Ile Lys Leu Lys Val Lys Xaa Val Thr Trp Lys Glu Val
          35          40          45
Xaa Lys Met Ser Val Glu Lys Arg Thr Gln Ser Arg Gln Lys Ser Gly
 50          55          60
Tyr Leu Ala Asn Cys Phe Leu Gln Ser Phe Ile Leu Gly Ser Val Asp
 65          70          75          80
Arg Asn Ile Cys Leu Leu Ile Val Met Val Tyr Asp His Tyr Leu Thr
          85          90          95
Ile Cys His His Leu Xaa Tyr Pro Phe Leu Met Gly Pro Leu Trp Gly
          100         105         110
Leu Gly Phe Gly Leu Thr Thr Ser Phe Val Val Asp Glu Leu Ile Val
          115         120         125
Ala Leu Met Ala Gln Leu Arg Phe Cys Val Pro Lys Gln Ile Asp His
          130         135         140
Phe Tyr Tyr Asp Phe Ser Pro Leu Val Val Leu Ala Tyr Thr Asp Thr
          145         150         155         160
Gly Leu Val Gln Val Thr Thr Phe Val Leu Phe Val Val Phe Leu Thr
          165         170         175
Val Pro Phe Gly Leu Val Leu Ile Ser Cys Ala Gln Ile Ala Val Thr
          180         185         190
Val Leu Arg Val Pro Ser Arg Thr Arg Arg Asn Lys Ala Phe Ser Thr
          195         200         205
Cys Ser Ser His Leu Asp Glu Val Ser Thr Phe Tyr Gly Ser Leu Met
          210         215         220
Val Trp Tyr Thr Glu Pro Ser Ala Val His Ser Gln Ile Leu Ser Lys
          225         230         235         240
Val Ile Ala Leu Leu Tyr Thr Val Val Thr Thr Ile Phe Asp Pro Gly
          245         250         255
Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ser Leu Arg Arg His
          260         265         270
Leu Tyr Cys Lys Pro Thr Glu Met Xaa Pro Lys Arg
          275         280

```

<210> 2314

<211> 312

<212> PRT

<213> Mus musculus (M18 6456795-1-142088-143512 370-1305)

<400> 2314

```

Ile Ser Pro Arg Met Asn Cys Ser Gln Ala Pro Gly Phe Ile Leu Leu
 1           5           10          15
Gly Leu Pro Arg Glu Pro Glu Lys Trp Gln His Phe Phe Ile Ile Phe
          20          25          30
Leu Gly Leu Tyr Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu
          35          40          45
Ala Ile Gly Ser Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu
          50          55          60
Ser Gln Leu Ser Leu Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro
          65          70          75          80

```

Lys Thr Leu Glu Thr Trp Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser
 85 90 95
 Gly Cys Leu Thr Gln Leu Tyr Phe Phe Gly Val Phe Ala Asp Met Asp
 100 105 110
 Asn Leu Leu Leu Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys
 115 120 125
 His Pro Leu Leu Tyr Pro Leu Leu Met Thr Pro Cys Arg Cys Glu Val
 130 135 140
 Leu Val Ser Gly Ser Trp Gly Ile Ala His Cys Val Ser Leu Met Tyr
 145 150 155 160
 Thr Leu Leu Leu Ser Gln Leu Tyr Phe His Thr Asn Gln Glu Ile Pro
 165 170 175
 Arg Phe Phe Cys Asp Cys Arg Pro Leu Leu Leu Leu Ser Cys Ser Asp
 180 185 190
 Thr His Leu Asn Glu Val Leu Met Met Ala Leu Ala Gly Val Leu Gly
 195 200 205
 Val Ser Ala Val Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr
 210 215 220
 Ala Val Ala Arg Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Thr
 225 230 235 240
 Thr Cys Ser Ser His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val
 245 250 255
 Phe Ala Thr Tyr Leu Lys Pro Pro Ser Thr Ser His Ser Ser Gly Glu
 260 265 270
 Val Val Ala Ala Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro
 275 280 285
 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg
 290 295 300
 Val Leu Asn Ile Glu Lys Ser Gln
 305 310

<210> 2315

<211> 325

<212> PRT

<213> Mus musculus (M19 6456795-1-14626-16881 1501-527)

<220>

<221> VARIANT

<222> (1)...(325)

<223> Xaa = Any Amino Acid

<400> 2315

Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
 1 5 10 15
 Leu Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
 20 25 30
 Val Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
 35 40 45
 Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
 50 55 60
 Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val
 65 70 75 80
 Thr Leu Pro Lys Met Leu Gln Asn Leu Leu Ser Thr Asn Lys Ala Ile
 85 90 95
 Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
 100 105 110
 Ser Thr Glu Ala Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
 115 120 125
 Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
 130 135 140
 Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala

```

145          150          155          160
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
          165          170          175
His Val His His Phe Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
          180          185          190
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
          195          200          205
Thr Ile Ala Leu Thr Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
          210          215          220
Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
225          230          235          240
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Leu
          245          250          255
Tyr Val Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
          260          265          270
Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
          275          280          285
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
          290          295          300
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Phe Glu Glu Ile Xaa
305          310          315          320
Ile Thr Leu Leu Trp
          325

```

<210> 2316

<211> 237

<212> PRT

<213> Mus musculus (M20 6456795-1-147325-149242 1694-983)

<220>

<221> VARIANT

<222> (1)...(237)

<223> Xaa = Any Amino Acid

<400> 2316

```

Leu Xaa Thr Tyr Ile Pro Thr His Thr His Thr His Thr His
1          5          10          15
Thr His Thr His Ile Tyr Ile Cys Asn Tyr Asn Val Gln Arg Asn Asn
          20          25          30
Gly Tyr Gln Val Asp His Tyr Leu Xaa Ile Cys His Pro Leu His Tyr
          35          40          45
Pro Leu Leu Met Gly His Gln Trp Cys Leu Gly Phe Val Leu Thr Leu
          50          55          60
Gln Leu Phe Gly Ile Thr Val Asp Gly Leu Val Val Ile Leu Val Ala
65          70          75          80
Gln Met Trp Phe Cys Gly Pro Asn Leu Ile Asp Tyr Phe Xaa Tyr Asn
          85          90          95
Phe Ser Pro Ile Met Asp Leu Ala Xaa Ser Asp Thr Gln Val Phe Gln
          100          105          110
Val Ile Thr Phe Val Leu Ser Val Val Phe Leu Thr Val Pro Phe Gly
          115          120          125
Leu Val Leu Ile Ser Tyr Ile Gln Ile Val Val Thr Val Leu Arg Val
          130          135          140
Leu Ser Gly Asp Arg Arg Thr Lys Asp Phe Ser Thr Cys Ser Ser His
145          150          155          160
Leu Ala Val Val Ser Thr Phe Tyr Arg Ser Leu Met Val Leu Tyr Thr
          165          170          175
Val Pro Leu Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Lys Val Val
          180          185          190
Ile Pro Ile Phe Asn His Val Ile Tyr Thr Leu Arg Asn Gln Glu Val
195          200          205

```

Pro Xaa Ala Leu Arg Arg His Leu Tyr Cys Lys Pro Thr Glu Met Xaa
 210 215 220
 Pro Lys Met Glu Gly Ser Lys Asp Phe Leu Phe Asn Cys
 225 230 235

<210> 2317

<211> 237

<212> PRT

<213> Mus musculus (M21 6456795-1-153518-155435 1694-983)

<220>

<221> VARIANT

<222> (1)...(237)

<223> Xaa = Any Amino Acid

<400> 2317

Leu Xaa Thr Tyr Ile Pro Thr His Thr His Thr His Thr His Thr His
 1 5 10 15
 Thr His Thr His Ile Tyr Ile Cys Asn Tyr Asn Val Gln Arg Asn Asn
 20 25 30
 Gly Tyr Gln Val Asp His Tyr Leu Xaa Ile Cys His Pro Leu His Tyr
 35 40 45
 Pro Leu Leu Met Gly His Gln Trp Cys Leu Gly Phe Val Leu Thr Leu
 50 55 60
 Gln Leu Phe Gly Ile Thr Val Asp Gly Leu Val Val Ile Leu Val Ala
 65 70 75 80
 Gln Met Trp Phe Cys Gly Pro Asn Leu Ile Asp Tyr Phe Xaa Tyr Asn
 85 90 95
 Phe Ser Pro Ile Met Asp Leu Ala Xaa Ser Asp Thr Gln Val Phe Gln
 100 105 110
 Val Ile Thr Phe Val Leu Ser Val Val Phe Leu Thr Val Pro Phe Gly
 115 120 125
 Leu Val Leu Ile Ser Tyr Ile Gln Ile Val Val Thr Val Leu Arg Val
 130 135 140
 Leu Ser Gly Asp Arg Arg Thr Lys Asp Phe Ser Thr Cys Ser Ser His
 145 150 155 160
 Leu Ala Val Val Ser Thr Phe Tyr Arg Ser Leu Met Val Leu Tyr Thr
 165 170 175
 Val Pro Leu Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Lys Val Val
 180 185 190
 Ile Pro Ile Phe Asn His Val Ile Tyr Thr Leu Arg Asn Gln Glu Val
 195 200 205
 Pro Xaa Ala Leu Arg Arg His Leu Tyr Cys Lys Pro Thr Glu Met Xaa
 210 215 220
 Pro Lys Met Glu Gly Ser Lys Asp Phe Leu Phe Asn Cys
 225 230 235

<210> 2318

<211> 318

<212> PRT

<213> Mus musculus (M22 6456795-1-37464-41929 1501-549)

<220>

<221> VARIANT

<222> (1)...(318)

<223> Xaa = Any Amino Acid

<400> 2318

Cys Val Ile Phe Xaa Val Met Leu Asn Gln Thr Ser Val Thr Glu Phe
 1 5 10 15
 Ile Leu Leu Gly Val Arg Asp Ile Gln Glu Pro Gln Pro Phe Leu Phe

```

      20      25      30
Ala Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
      35      40      45
Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
      50      55      60
Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val
      65      70      75      80
Thr Val Pro Lys Met Leu Glu Asn Leu Leu Ser Thr Asn Lys Ala Ile
      85      90      95
Ser Leu Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
      100      105      110
Thr Thr Glu Ser Leu Leu Leu Ala Val Met Ala Phe Asp Arg Phe Val
      115      120      125
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn Trp Gln Val
      130      135      140
Cys Ile Leu Met Ala Val Thr Ile Trp Thr Ile Ala Phe Leu His Ala
      145      150      155      160
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Leu Asn
      165      170      175
His Ile His His Phe Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala
      180      185      190
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
      195      200      205
Thr Ile Ala Ser Val Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
      210      215      220
Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
      225      230      235      240
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Val Leu Phe
      245      250      255
Tyr Ala Pro Val Leu Phe Thr Tyr Ile Arg Pro Thr Ser Gly Ser Ser
      260      265      270
Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
      275      280      285
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
      290      295      300
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Leu Leu Glu Glu
      305      310      315

```

<210> 2319

<211> 308

<212> PRT

<213> Mus musculus (M23 6456795-1-63066-65167 771-1694)

<400> 2319

```

Val Leu Leu Asn His Thr Leu Val Thr Glu Phe Leu Leu Leu Gly Val
  1      5      10      15
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala
      20      25      30
Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Met Ile Val
      35      40      45
Ile Ser Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Gly Asn
      50      55      60
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
      65      70      75      80
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
      85      90      95
Ile Thr Gln Leu His Phe Phe Asn Phe Leu Gly Ser Thr Glu Ala Leu
      100      105      110
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
      115      120      125
Leu His Tyr Pro Ala Ile Met Asn Ser Gln Val Cys Ile Gln Val Ala

```

```

      130              135              140
Ile Ser Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
145              150              155              160
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn His Ile His His Phe
      165              170              175
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
      180              185              190
Leu Asn Arg Trp Leu Leu Asn Thr Leu Thr Gly Thr Val Ala Ile Gly
      195              200              205
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
      210              215              220
Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
225              230              235              240
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
      245              250              255
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
      260              265              270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
      275              280              285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
      290              295              300
Ile Arg Ile Leu
305

```

<210> 2320

<211> 325

<212> PRT

<213> Mus musculus (M24 6456795-1-750-2697 1501-527)

<220>

<221> VARIANT

<222> (1)...(325)

<223> Xaa = Any Amino Acid

<400> 2320

```

Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
1      5      10      15
Leu Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
      20      25      30
Val Ile Phe Phe Thr Ile Tyr Phe Ile Asn Ile Thr Gly Asn Gly Ala
      35      40      45
Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
      50      55      60
Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val
      65      70      75      80
Thr Val Pro Lys Leu Leu Gln Asn Leu Leu Ser Thr Ser Lys Ala Ile
      85      90      95
Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
      100      105      110
Ser Thr Glu Thr Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
      115      120      125
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
      130      135      140
Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala
      145      150      155      160
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
      165      170      175
His Val His His Phe Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
      180      185      190
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
      195      200      205

```

```

Thr Ile Ala Leu Thr Ser Phe Phe Leu Ile Phe Leu Ser Tyr Phe Tyr
 210                      215                      220
Ile Ile Thr Asn Leu Leu Leu Lys Thr Arg Ser Cys Ser Met Leu His
225                      230                      235                      240
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Val Leu Phe
                      245                      250                      255
Tyr Ala Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
                      260                      265                      270
Leu Asp Gln Asp Thr Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
                      275                      280                      285
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
290                      295                      300
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Pro Glu Glu Ser Lys
305                      310                      315                      320
Glu Val Phe Phe Ser
                      325

```

<210> 2321

<211> 177

<212> PRT

<213> Mus musculus (M25 6456795-1-78460-79066 2-526)

<220>

<221> VARIANT

<222> (1)...(177)

<223> Xaa = Any Amino Acid

<400> 2321

```

Val Ser Ala His Val Cys Met Gly Cys Xaa Leu Ser Trp Pro Val Arg
 1                      5                      10                      15
Cys Glu Ile Ile Phe Gly Val Met His Thr Thr Val Asn Phe Ser Ile
                      20                      25                      30
Val Leu Cys Gly Thr Ser Val Ile His Xaa Phe Cys Asp Val Leu Leu
35                      40                      45
Val Leu Lys Leu Ser Cys Leu Tyr Asp His Val Ser Glu Ile Ala Ile
50                      55                      60
Ser Asp Phe Ser Ile Ser Leu Ala Phe Phe Cys Phe Ile Ser Pro Asn
65                      70                      75                      80
Phe Thr Tyr Val His Ile Phe Ser Thr Glu Leu Arg Met Pro Phe Val
                      85                      90                      95
Glu Gly Lys Thr Ser Val Phe Ser Thr Cys Leu Cys His Met Thr Ser
100                      105                      110
Ile Leu Phe Ile Pro Thr Gly Ile Phe Glu Phe Leu Arg Ser His Thr
115                      120                      125
Glu Ser Ser Thr Ser Leu Asp Phe Ile Leu Asn Phe Ser Tyr Phe Ser
130                      135                      140
Leu Ser Thr Leu Asn Pro Gly Ile Tyr Ser Leu Arg Asn Glu Ala Val
145                      150                      155                      160
Asp Thr Val Gln Arg Lys Ile Phe Phe Phe Lys Glu Lys Tyr Leu Phe
165                      170                      175
Leu

```

<210> 2322

<211> 308

<212> PRT

<213> Mus musculus (M26 6456795-1-84123-87238 211-1134)

<400> 2322

```

Val Leu Leu Asn His Thr Phe Ile Thr Glu Phe Leu Leu Leu Gly Val
 1                      5                      10                      15

```

Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Met Val Leu Ala
 20 25 30
 Met Tyr Phe Ile Asn Val Phe Gly Asn Gly Ala Ile Met Met Ile Val
 35 40 45
 Ile Leu Asp Ser Arg Leu Tyr Ser Pro Met Tyr Phe Phe Leu Gly Asn
 50 55 60
 Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
 65 70 75 80
 Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
 85 90 95
 Ile Thr Gln Leu His Phe Phe His Phe Leu Gly Cys Thr Asp Ala Leu
 100 105 110
 Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
 115 120 125
 Leu His Tyr Pro Ser Ile Met Asn Arg Gln Val Cys Ile Gln Val Ala
 130 135 140
 Ala Thr Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
 145 150 155 160
 Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Arg Ile His His Phe
 165 170 175
 Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
 180 185 190
 Leu Asn Arg Trp Leu Leu Asn Thr Leu Ala Gly Thr Ile Gly Ile Gly
 195 200 205
 Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
 210 215 220
 Phe Leu Lys Thr His Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
 245 250 255
 Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
 260 265 270
 Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ala Leu Arg Asn Lys Glu Val Arg Cys Ala Leu Asn Arg Lys
 290 295 300
 Leu Arg Ile Leu
 305

<210> 2323

<211> 314

<212> PRT

<213> Mus musculus (M27 6456795-1-89089-90071 35-969)

<220>

<221> VARIANT

<222> (1)...(314)

<223> Xaa = Any Amino Acid

<400> 2323

Ser Leu Phe Tyr Ser Gln Arg Ser Arg Met Asn Val Ala Asn Phe Thr
 1 5 10 15
 Ala Met Thr Ile Phe Leu Leu Leu Met Gly Phe Ser Arg Asn Ser Gln
 20 25 30
 Val Glu Ile Ile Phe Ser Thr Leu Ala Leu Val Val Leu Ile Gly Thr
 35 40 45
 Ile Ser Ile Val Ala Val Thr Ser Leu Ser Ile Arg Leu Cys Ser Leu
 50 55 60
 Met Pro Phe Leu Leu Ile His Leu Phe Cys Phe Asp Val Cys Tyr Ile
 65 70 75 80
 Ser Val Met Met Pro Lys Ser Val Cys Ser Ser Phe Met Tyr Ser Ala

85 90 95
 Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Val Phe Tyr Ser Gln Ser
 100 105 110
 Ser Tyr Thr Ala Met Ala Ile Leu Thr Val Met Ser Tyr Asp Cys Tyr
 115 120 125
 Met Ala Val Trp His Lys Val Ile Thr Asn Val Ser Thr Cys Ile His
 130 135 140
 Gly Val Leu Ala Val Leu Val Asn Gly Cys Glu Ile Ile Phe Gly Val
 145 150 155 160
 Met His Thr Thr Leu Thr Phe Ser Ile Tyr Ile Cys Gly Thr Ser Thr
 165 170 175
 Ile Arg Xaa Phe Cys Asp Val Leu Leu Val Leu Lys Leu Ser Phe Thr
 180 185 190
 Asn Asp His Val Asn Glu Leu Glu Ser Leu Ala Phe Ser Ser Val Glu
 195 200 205
 Gly Arg Thr Lys Ser Phe Ser Thr Cys Leu Gly His Val Ser Val Gly
 210 215 220
 Ser Leu Phe Asn Pro Pro Gly Val Phe Glu Phe Leu Asn Pro Tyr Ser
 225 230 235 240
 Glu Ser Pro Thr Ser Leu Asp Ile Ile Val Thr Val Phe Ile Leu Pro
 245 250 255
 Gln Thr Leu Ser Val Glu Ile Tyr Ser Leu Ser Asn Glu Ala Ile Asp
 260 265 270
 Thr Ala Xaa Arg Lys Phe Phe Phe Gln Arg Lys Thr Ser Leu Ser Ile
 275 280 285
 Leu His Tyr Phe Leu Leu Gly Ser His Ile Xaa Xaa Val Leu Arg Lys
 290 295 300
 Thr Thr Val Ser Met Asn Gln Leu Lys Leu
 305 310

<210> 2324

<211> 309

<212> PRT

<213> Mus musculus (M28 6456795-1-95949-101645 434-1360)

<400> 2324

Val Leu Leu Asn Gln Thr Leu Val Thr Glu Phe Leu Leu Leu Gly Val
 1 5 10 15
 Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala
 20 25 30
 Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Leu Ile Val
 35 40 45
 Ile Ser Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn
 50 55 60
 Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Ile
 65 70 75 80
 Leu Asp Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
 85 90 95
 Ile Thr Gln Leu Tyr Phe Phe His Leu Leu Gly Ser Thr Glu Ala Leu
 100 105 110
 Leu Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
 115 120 125
 Leu His Tyr Pro Ser Ile Met Asn Gly Gln Val Cys Ile Gln Val Ala
 130 135 140
 Ile Ser Ile Trp Ala Ile Pro Phe Val His Ala Leu Val His Ser Ile
 145 150 155 160
 Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Gln Ile His His Phe
 165 170 175
 Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
 180 185 190
 Leu Asn Arg Trp Leu Leu Asn Thr Phe Thr Gly Thr Phe Ala Ile Gly

195 200 205
 Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu
 210 215 220
 Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
 245 250 255
 Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
 260 265 270
 Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
 275 280 285
 Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
 290 295 300
 Leu Arg Ile Leu Leu
 305

<210> 2325

<211> 296

<212> PRT

<213> Mus musculus (M29 6691272-106-1-1090 908-19)

<220>

<221> VARIANT

<222> (1)...(296)

<223> Xaa = Any Amino Acid

<400> 2325

Cys Ile Phe Ile Gly Val Phe Leu Ile Ser Ser Ala Ser Gly Ala Met
 1 5 10 15
 Pro Gly Gln Asn Tyr Ser Thr Ile Ser Glu Phe Ile Leu Phe Gly Phe
 20 25 30
 Ser Ala Phe Pro His Gln Met Leu Pro Ala Leu Phe Leu Leu Tyr Leu
 35 40 45
 Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Val Ile Met Ala Ala
 50 55 60
 Ile Trp Thr Glu His Arg Leu His Thr Pro Met Tyr Leu Phe Leu Cys
 65 70 75 80
 Ala Leu Ser Ile Ser Glu Ile Leu Phe Thr Val Val Ile Thr Pro Arg
 85 90 95
 Met Leu Ser Asp Met Leu Ser Thr His Arg Ser Ile Thr Phe Ile Ala
 100 105 110
 Cys Ala Asn Gln Leu Phe Phe Ser Phe Thr Phe Gly Tyr Thr His Ser
 115 120 125
 Phe Leu Leu Val Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Arg
 130 135 140
 Pro Leu His Tyr His Ala Leu Met Ser Leu Gln Gly Cys Ala Arg Leu
 145 150 155 160
 Val Ala Trp Ser Trp Ala Gly Gly Ser Leu Ile Gly Met Ala Leu Thr
 165 170 175
 Ile Ile Ile Phe His Leu Thr Phe Cys Glu Ser Asn Val Ile His His
 180 185 190
 Ile Leu Cys His Val Phe Ser Leu Lys Leu Ala Cys Gly Glu Arg
 195 200 205
 Thr Ala Phe Val Thr Ile Ala Val Ile Leu Val Cys Val Thr Pro Leu
 210 215 220
 Ile Gly Cys Leu Val Phe Ile Ile Leu Ser Tyr Ile Phe Ile Val Ala
 225 230 235 240
 Ala Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg His Lys Thr Phe Ser
 245 250 255
 Thr Cys Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Phe Ala
 260 265 270

Ser Leu Ile Tyr Leu Gln Gly Tyr Pro Leu Glu Ser Asp Xaa Thr Gly
 275 280 285
 Met Ser Ser Trp His Ala Ser Phe
 290 295

<210> 2326

<211> 334

<212> PRT

<213> Mus musculus (M30 6691273-103-1206-2961 586-1585)

<220>

<221> VARIANT

<222> (1)...(334)

<223> Xaa = Any Amino Acid

<400> 2326

Trp Ala Asn Gln Ser Arg Ala Arg Glu Leu Glu Phe Val Leu Leu Gly
 1 5 10 15
 Phe Ala His Val Pro Ser Leu Arg Pro Met Leu Ala Ala Leu Phe Leu
 20 25 30
 Ala Ala Phe Leu Leu Thr Met Ser Gly Asn Ser Leu Ile Val Leu Leu
 35 40 45
 Thr Ser Leu Asp Phe Gly Leu Arg Thr Pro Met Tyr Phe Phe Leu Arg
 50 55 60
 Gln Leu Ala Leu Val Glu Ile Cys Phe Ser Leu Asp Val Ala Pro Arg
 65 70 75 80
 Leu Leu Val Thr Leu Leu Gln Pro Gly Arg Gly Val Ser Pro Thr Ser
 85 90 95
 Cys Ala Leu Gln Leu Leu Val Leu Ser Cys Val Thr Ser Glu Cys
 100 105 110
 Phe Leu Leu Met Val Met Ala Trp Asp Arg Phe Leu Ala Ile Cys Arg
 115 120 125
 Pro Leu Arg Tyr Gly Ala Ile Met Ser Pro Gln Leu Cys Tyr Leu Leu
 130 135 140
 Ala Thr Thr Cys Trp Leu Ala Gly Ile Pro Val Ala Leu Val Phe Thr
 145 150 155 160
 Ile Trp Leu Phe Asn Phe Pro Phe Cys Gly Pro Arg Gly Ile Arg His
 165 170 175
 Phe Phe Cys Asp Ile Ala Pro Leu Leu Ser Leu Val Cys Ala Asp Thr
 180 185 190
 Arg Val Phe Glu Ala Asn Val Phe Val Ala Thr Val Leu Val Ile Met
 195 200 205
 Val Pro Phe Cys Leu Ile Ala Thr Ser Tyr Val Met Ile Leu Val Ala
 210 215 220
 Val Leu Arg Met Pro Ser Ala Ser Gly Arg His Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Ile Val Val Ile Leu Phe Tyr Gly Thr Thr Gly
 245 250 255
 Val Ile His Leu Arg Pro Lys Ala Ser Tyr Ser Pro Glu Ser Lys Gln
 260 265 270
 Val Val Ser Leu Ser Tyr Thr Met Val Thr Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Phe Gly Arg Val
 290 295 300
 Cys Cys Gly Arg Xaa Glu Ser Arg Leu His Glu Xaa Thr His Leu Leu
 305 310 315 320
 Cys Gln Pro Phe Ser Val Arg Xaa Leu Leu Arg Pro Thr Phe
 325 330

<210> 2327

<211> 330

<212> PRT

<213> Mus musculus (M31 6691273-105-4369-6206 1597-608)

<220>

<221> VARIANT

<222> (1)...(330)

<223> Xaa = Any Amino Acid

<400> 2327

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Leu | Xaa | Cys | Tyr | Xaa | Arg | Thr | Asp | Asp | Asn | Asn | Trp | Leu | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ser | Leu | Gln | Met | Ala | Arg | Ser | Leu | Glu | Leu | Ala | Asn | Met | Thr | Arg | Val |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Lys | Phe | Leu | Leu | Leu | Gly | Leu | Ser | Thr | Arg | Leu | Asp | Ile | Arg | Asp |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Leu | Phe | Ala | Val | Phe | Leu | Thr | Leu | Tyr | Leu | Leu | Thr | Leu | Val | Glu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Thr | Leu | Ile | Ile | Tyr | Leu | Ile | Phe | Ser | His | Lys | Glu | Leu | His | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Pro | Met | Tyr | Phe | Phe | Leu | Gly | Asn | Leu | Ser | Cys | Leu | Glu | Met | Cys | Tyr |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Val | Ser | Val | Thr | Met | Pro | Thr | Leu | Leu | Val | Gly | Leu | Trp | Thr | Gly | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Tyr | His | Ile | Pro | Phe | Thr | Leu | Cys | Met | Thr | Gln | Leu | Phe | Phe | Phe | Ile |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Val | Leu | Ile | Cys | Thr | Glu | Cys | Thr | Leu | Leu | Ala | Ser | Met | Ala | Tyr | Asp |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Tyr | Val | Ala | Ile | Cys | Arg | Pro | Leu | His | Tyr | Pro | Leu | Leu | Met | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Pro | Gln | Val | Cys | Leu | Gly | Leu | Ala | Leu | Ser | Ser | Trp | Leu | Gly | Gly | Leu |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Ile | Val | Ser | Val | Ala | Lys | Thr | Thr | Cys | Ile | Ala | Ser | Leu | Ser | Tyr | Cys |
| | | 180 | | | | | 185 | | | | | | 190 | | |
| Gly | Pro | Asn | Val | Leu | Asn | Gln | Phe | Phe | Cys | Asp | Val | Ser | Pro | Leu | Leu |
| | | 195 | | | | 200 | | | | | | 205 | | | |
| Asn | Leu | Ser | Cys | Thr | His | Val | Ala | Leu | Thr | Glu | Leu | Val | Asp | Phe | Ile |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | Ala | Ile | Val | Ile | Phe | Cys | Gly | Thr | Leu | Leu | Val | Ser | Leu | Ala | Ser |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Tyr | Ser | Ala | Ile | Gly | Met | Ala | Val | Leu | Arg | Met | Pro | Ser | Ala | Ala | Ala |
| | | | 245 | | | | | | 250 | | | | | 255 | |
| Arg | Arg | Lys | Ala | Phe | Ser | Thr | Cys | Ala | Ser | His | Leu | Val | Val | Val | Gly |
| | | 260 | | | | | 265 | | | | | | 270 | | |
| Ile | Phe | Tyr | Ser | Ala | Ala | Leu | Phe | Ile | Tyr | Cys | Arg | Pro | Ser | Arg | Ile |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Lys | Ser | Met | Asp | Leu | Asn | Lys | Val | Leu | Ser | Val | Ile | Tyr | Thr | Val | Val |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Thr | Pro | Leu | Cys | Asn | Pro | Ile | Ile | Tyr | Cys | Leu | Arg | Asn | Lys | Glu | Val |
| 305 | | | | | 310 | | | | | 315 | | | | | 320 |
| His | Thr | Val | Leu | Lys | Lys | Thr | Leu | His | Trp | | | | | | |
| | | | 325 | | | | | | 330 | | | | | | |

<210> 2328

<211> 319

<212> PRT

<213> Mus musculus (M32 6691273-108-10257-11726 1388-432)

<220>

<221> VARIANT

<222> (1)...(319)

<223> Xaa = Any Amino Acid

<400> 2328

Leu Val Pro Ser Phe Gln Arg His Thr Met Ala Asn Leu Ser Thr Val
 1 5 10 15
 Ser Val Phe Ile Leu Gln Gly Phe Ser Ala Val Pro Ala Leu Gln Leu
 20 25 30
 Leu Ser Met Ala Ile Phe Leu Leu Ile Tyr Leu Ala Ala Val Leu Gly
 35 40 45
 Asn Val Ser Ile Met Ile Ala Val Thr Leu Asp Ser His Leu His Thr
 50 55 60
 Pro Met Tyr Phe Phe Ile Lys His Leu Ser Leu Val Asp Leu Cys Ser
 65 70 75 80
 Thr Ser Thr Thr Leu Pro Arg Ala Leu Val Ala Thr Met Ala Asp Thr
 85 90 95
 Lys Glu Ile Ser Leu Pro Ala Cys Ala Ser Gln Leu Phe Ala Phe Val
 100 105 110
 Cys Phe Gly Ser Leu Glu Cys Phe Leu Ile Thr Ala Met Ala Phe Asp
 115 120 125
 Arg Cys Leu Ala Ile Tyr Arg Pro Leu Thr Tyr Gly Val Thr Met Ser
 130 135 140
 Ser Gln Thr Cys Val Ser Leu Val Val Val Ala Trp Val Ser Gly Leu
 145 150 155 160
 Leu Phe Ser Thr Phe His Met Val Asn Thr Phe Ser Leu Pro Phe Cys
 165 170 175
 Gly Pro Asn Met Ile Asp His Phe Phe Cys Asp Ile Pro Pro Leu Met
 180 185 190
 His Leu Ala Cys Gly Asp Thr Gln Gly His Glu Ala Ala Gly Phe Ile
 195 200 205
 Val Ser Gly Cys Val Ile Met Thr Cys Phe Ala Leu Thr Cys Leu Ser
 210 215 220
 Tyr Val Leu Ile Val Tyr Thr Val Val His Ile Arg Ser Ala Ala Gly
 225 230 235 240
 Arg Trp Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ala Thr Val Leu
 245 250 255
 Leu Phe Tyr Gly Thr Gly Ser Ser Ala Tyr Met Gln Pro Thr Ala His
 260 265 270
 Tyr Ser Pro Leu Gln Gly Arg Met Ala Ala Ile Phe Tyr Ser Ile Leu
 275 280 285
 Met Pro Thr Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Met
 290 295 300
 Lys Ala Ala Leu Arg Lys Leu Tyr Pro Gln Val Pro Ser Xaa Ile
 305 310 315

<210> 2329

<211> 133

<212> PRT

<213> Mus musculus (M33 6850399-12-3847-5066 800-1195)

<220>.

<221> VARIANT

<222> (1)...(133)

<223> Xaa = Any Amino Acid

<400> 2329

Thr Glu Leu Asn Ser Cys Leu Gln Trp Leu Pro Ile Leu His Arg Ser
 1 5 10 15
 Thr Thr Glu Ala Ser Ser Ala Val Leu Xaa Glu Leu Leu Leu Gln Arg
 20 25 30
 Pro Ala Ser Ala Leu Xaa Pro Pro Ile Gly Ser Ser Asp Leu Ala Gly
 35 40 45
 Cys Phe Ser Val Tyr Ile Leu Thr Leu Thr Asp Asn Thr Thr Val Arg

```

      50              55              60
Ile Asn Ser Phe Leu Asn His Lys Leu His Thr Pro Met Ser Ser Phe
65              70              75              80
Cys Phe Gly Leu Ser Ile Leu Asp Leu Cys Phe Thr Pro Ser Thr Val
      85              90              95
Pro Pro Asp His Gln Ile Leu Gly Asn Pro Xaa Gly Pro Glu Lys Leu
      100              105              110
Ala Ile Leu Val Xaa Ala Ile Gln Leu Ser Val Ala Leu Gly Phe Gly
      115              120              125
Ser Thr Val Cys Val
      130

```

<210> 2330

<211> 191

<212> PRT

<213> Mus musculus (M35 6850399-2-1-641 21-587)

<220>

<221> VARIANT

<222> (1)...(191)

<223> Xaa = Any Amino Acid

<400> 2330

```

Asp Ala Ile Ser Gln Pro Leu His Tyr Gly Ala Ile Thr His Ser Glu
1              5              10              15
Ile Leu Trp Gln Leu Ala Thr Val Ala Gln Ile Ser Gly Phe Val Glu
      20              25              30
Phe Arg Ser Pro Ser Ile Phe Gln Leu Pro Arg Cys Gly Gly Gly Gly
      35              40              45
Val Val Cys Lys Ala Xaa Asn Tyr Leu Cys Arg His Asn Phe Pro Gly
      50              55              60
Lys Xaa Leu Ser Thr Val Thr Ala Leu Cys Val Val Thr Leu Met Gly
65              70              75              80
Leu Val Leu Val Ser Tyr Val Ser Ile Val Lys Gly Val Leu Arg Gly
      85              90              95
Gly Pro Ile Glu Asp Met Gly Lys Ala Phe Gly Thr Cys Gly Tyr His
      100              105              110
Leu Ile Ala Gly Leu Leu Phe Phe Lys Ala Ile Ile Ser Val Tyr Thr
      115              120              125
His Pro Arg Asn Glu Phe Thr Gly Ser His Gly Lys Pro Phe Leu Leu
      130              135              140
Leu Tyr Pro Val Val Met Pro Ser Leu Gly Pro Leu Ile Asp Thr Leu
145              150              155              160
Arg Ser Gln Glu Ser Ser Arg Val Ile Lys Arg Leu Val Ala Lys Asp
      165              170              175
Xaa Lys Leu Ser Arg Lys Asn Thr Xaa Cys Thr Ser Arg Ser Trp
      180              185              190

```

<210> 2331

<211> 320

<212> PRT

<213> Mus musculus (M36 7263202-1-54100-55962 166-1125)

<400> 2331

```

Ser Ser Gln Ala Pro Glu Lys Gln Gln Asp Asn Gly Thr Trp Leu Val
1              5              10              15
Thr Glu Phe Leu Leu Val Gly Phe Ser Asn Leu Pro Glu Leu Arg Pro
      20              25              30
Thr Leu Phe Ile Leu Phe Leu Leu Thr Tyr Leu Val Thr Leu Ser Gly
      35              40              45
Asn Ala Thr Ile Ile Thr Ile Ile Gln Val Asp Arg Thr Leu His Thr

```

```
<210> 2332
<211> 122
<212> PRT
<213> Mus musculus (M38 7340303-58-1-1344 4-367)
```

```
<220>  
<221> VARIANT  
<222> (1)...(122)  
<223> Xaa = Any Amino Acid
```

1399

<210> 2333
 <211> 356
 <212> PRT
 <213> Mus musculus (M41 7363372-318-7546-10891 3278-2211)

<220>
 <221> VARIANT
 <222> (1)...(356)
 <223> Xaa = Any Amino Acid

<400> 2333
 Tyr Val Phe Phe Cys Phe Gln Tyr Ser Xaa Glu Trp Lys Thr Glu Leu
 1 5 10 15
 Glu Met Asp Val Ser Asn Gln Thr Thr Val Thr Glu Phe Val Leu Leu
 20 25 30
 Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile
 35 40 45
 Leu Ser Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu
 50 55 60
 Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
 65 70 75 80
 Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro
 85 90 95
 Leu Val Leu Asp Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser
 100 105 110
 Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu
 115 120 125
 Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys
 130 135 140
 Asn Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala Tyr Val Pro
 145 150 155 160
 Met Ala Val Ser Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln
 165 170 175
 Ile Ser Leu Ala Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn
 180 185 190
 His Phe Ile Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp
 195 200 205
 Ile Ser Ile Asn Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu
 210 215 220
 Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser
 225 230 235 240
 Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser
 245 250 255
 Thr Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile
 260 265 270
 Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp
 275 280 285
 Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Leu Leu
 290 295 300
 Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val
 305 310 315 320
 Lys Ala Ala Val Arg Asn Leu Ala Ser His Arg Cys Leu Thr Phe Xaa
 325 330 335
 Trp Arg Asp Arg Ala His Asp Pro His Val Leu Met Ala Leu Thr Xaa
 340 345 350
 Glu Ser Tyr Cys
 355

<210> 2334
 <211> 331

<212> PRT

<213> Mus musculus (M42 7363372-319-4901-8603 988-1980)

<400> 2334

Cys Pro Leu Leu Ser Gln Asp Gly Lys Arg Thr Cys Glu Met Glu Gly
 1 5 10 15
 Ala Asn Gln Ser Thr Val Ala Glu Phe Val Leu Leu Gly Leu Ser Asp
 20 25 30
 His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu Leu Met Tyr
 35 40 45
 Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu Val Ser Ile Leu
 50 55 60
 Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser
 65 70 75 80
 Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Ile Pro Leu Val Leu Asp
 85 90 95
 Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser Gly Cys Ala Val
 100 105 110
 Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu Cys Val Leu Leu
 115 120 125
 Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
 130 135 140
 Tyr Pro Val Val Met Asn Lys Ser Ala Tyr Val Pro Met Ala Val Ser
 145 150 155 160
 Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln Ile Ser Leu Ala
 165 170 175
 Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn His Phe Thr Cys
 180 185 190
 Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile Ser Ile Asn
 195 200 205
 Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu Gly Val Pro Val
 210 215 220
 Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Thr Ile Leu Arg
 225 230 235 240
 Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ala
 245 250 255
 His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile Leu Phe Met Tyr
 260 265 270
 Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys Gln Asp Val
 275 280 285
 Ser Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Leu Thr Pro Met Leu
 290 295 300
 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Val
 305 310 315 320
 Arg Asn Leu Val Gly Gln Lys Cys Leu Ile Gln
 325 330

<210> 2335

<211> 324

<212> PRT

<213> Mus musculus (M43 7363372-320-18353-20567 840-1811)

<220>

<221> VARIANT

<222> (1)...(324)

<223> Xaa = Any Amino Acid

<400> 2335

Asn Met Glu Arg Ser Asn Lys Thr Thr Pro Val Ser Ser Phe Ile Leu
 1 5 10 15
 Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu

```

      20      25      30
Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Val Val Leu Ile
      35      40      45
Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe
      50      55      60
Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val
65      70      75
Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe
      85      90      95
Ser Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr
      100      105      110
Glu Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile
      115      120      125
Cys Asn Pro Leu Arg Tyr Pro Val Val Met Ser Lys Ala Ala Tyr Val
      130      135      140
Pro Met Ala Ala Gly Ser Trp Val Ser Gly Ser Ile Thr Ala Thr Val
145      150      155
Gln Ile Ser Leu Ala Met Thr Leu Pro Phe Cys Gly Asp Asn Val Ile
      165      170      175
Asn His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala
      180      185      190
Asp Ile Ser Ile Asn Val Ile Ser Met Ala Val Ala Asn Ala Met Phe
      195      200      205
Leu Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu
      210      215      220
Ser Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe
225      230      235
Ser Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr
      245      250      255
Ile Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala
      260      265      270
Asp Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val
      275      280      285
Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp
      290      295      300
Val Lys Ala Ala Val Thr Asn Leu Val Gly Gln Lys His Phe Lys Trp
305      310      315      320
Xaa Trp Cys Met

```

<210> 2336

<211> 257

<212> PRT

<213> Mus musculus (M44 7363372-320-22007-23346 51-820)

<220>

<221> VARIANT

<222> (1)...(257)

<223> Xaa = Any Amino Acid

<400> 2336

```

Leu Leu Phe Val Val Lys Met Lys Arg Leu Gln Thr Cys Xaa Phe Xaa
1      5      10      15
Gln Pro Ala Leu Leu Arg Gly Leu Ser Ser Leu Lys Gly Gln Arg Asp
      20      25      30
Pro Arg Leu Asn Glu Cys Cys Met Pro Leu Leu Xaa Gln Asp Pro Arg
      35      40      45
Gly Lys Ala Ser Phe Leu Val Cys Leu Val Leu Val Thr Leu Ser Cys
50      55      60
Met Trp Gln Glu Gln Cys Pro Pro Met His Val Thr Phe Val His Ser
65      70      75      80

```

Leu Ala Val Arg Gln Leu Lys Val Ile Asn Ser Arg Ala Ala Cys Val
 85 90 95
 Leu Arg Ser Ala Glu Leu Xaa Ala Thr Gly Ala Thr Tyr Pro Leu Ser
 100 105 110
 Thr Asn Tyr Cys Ile Cys Lys Thr Arg Thr Ser Ala Arg Ala Asp Ile
 115 120 125
 Ser Ile Asn Val Ile Ser Ile Gly Val Glu Leu Gly Val Pro Val Leu
 130 135 140
 Phe Ile Phe Ile Ser Tyr Ile Phe Ile Leu Ser Thr Ile Leu Gly Ile
 145 150 155 160
 Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ala His
 165 170 175
 Leu Thr Met Val Ile Ile Phe Tyr Gly Thr Ile Leu Phe Met Tyr Gly
 180 185 190
 Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys Gln Asp Leu Ala
 195 200 205
 Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Val Thr Pro Met Leu Asn
 210 215 220
 Leu Arg Thr Thr Val Arg Ala Phe Ile Phe Arg Lys Tyr Phe Ser Gln
 225 230 235 240
 Xaa Trp Trp Gln Gly Met Leu Trp Thr Val Thr His Arg Thr Glu Lys
 245 250 255
 Ile

<210> 2337

<211> 321

<212> PRT

<213> Mus musculus (M45 7363372-320-7359-9353 512-1474)

<220>

<221> VARIANT

<222> (1)...(321)

<223> Xaa = Any Amino Acid

<400> 2337

Asp Ser Met Glu Ile Asn Asn Gln Thr Ser Phe Pro Val Ser Ser Phe
 1 5 10 15
 Ile Leu Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe
 20 25 30
 Met Leu Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Ile
 35 40 45
 Leu Ile Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr
 50 55 60
 Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser
 65 70 75 80
 Ser Val Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile
 85 90 95
 Ser Phe Ser Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly
 100 105 110
 Ala Thr Glu Cys Val Leu Leu Ser Met Met Ala Phe Asp Arg Tyr Val
 115 120 125
 Ala Ile Cys Asn Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala
 130 135 140
 Tyr Val Pro Met Ala Val Ser Ser Trp Ser Gly Ile Ala Val Ser
 145 150 155 160
 Val Val Gln Thr Ser Leu Ala Met Lys Leu Thr Phe Cys Gly Asp Asn
 165 170 175
 Val Ile Asn His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala
 180 185 190
 Cys Ala Asp Ile Ser Ile Asn Val Ile Ser Met Gly Val Thr Asn Ile

| | | |
|---|-----|-----|
| 195 | 200 | 205 |
| Ile Phe Leu Gly Val Pro Val Leu Phe Ile Ser Phe Ser Tyr Val Phe | | |
| 210 | 215 | 220 |
| Ile Leu Val Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys | | |
| 225 | 230 | 235 |
| Ala Phe Ser Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr | | 240 |
| | 245 | 250 |
| Gly Thr Ile Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu | | 255 |
| | 260 | 265 |
| Gly Ala Asp Lys Gln Asp Leu Ala Asp Xaa Leu Ile Ser Leu Phe Tyr | | 270 |
| | 275 | 280 |
| Gly Val Leu Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn | | 285 |
| | 290 | 295 |
| Lys Asp Val Arg Ala Ala Val Thr Asn Leu Val Leu Lys Lys Ser | | 300 |
| 305 | 310 | 315 |
| Phe | | 320 |

<210> 2338

<211> 300

<212> PRT

<213> Mus musculus (M50 8075174-14-7636-10544 2097-1198)

<220>

<221> VARIANT

<222> (1)...(300)

<223> Xaa = Any Amino Acid

<400> 2338

| | |
|---|-----|
| Gln Asp Leu Val Ala Thr Gly Val Ile Gly Ala Val Leu Ser Thr Met | |
| 1 | 5 |
| Gly Val Val Gly Val Val Gly Asn Val Tyr Thr Leu Val Val Met Cys | |
| | 20 |
| Arg Phe Leu Arg Ala Ser Ala Ser Met Tyr Val Tyr Val Val Asn Leu | |
| | 35 |
| Ala Leu Ala Asp Leu Leu Tyr Leu Leu Ser Ile Pro Phe Ile Val Ala | |
| | 50 |
| Thr Tyr Val Thr Lys Asp Trp His Phe Gly Asp Val Gly Cys Arg Val | |
| | 65 |
| Leu Phe Ser Leu Asp Phe Leu Thr Met His Ala Ser Ile Phe Thr Leu | |
| | 85 |
| Thr Ile Met Ser Ser Glu Arg Tyr Ala Val Leu Arg Pro Leu Asp | |
| | 100 |
| Thr Val Gln Arg Ser Lys Gly Tyr Arg Lys Leu Leu Ala Leu Gly Thr | |
| | 115 |
| Cys Cys Trp His Cys Cys Xaa Pro Tyr Pro Xaa Cys Tyr Ala Ile Arg | |
| | 130 |
| Leu Val Arg Arg Gly Ser Lys Ser Leu Cys Leu Pro Ala Trp Gly Pro | |
| | 145 |
| Arg Ala His Arg Thr Tyr Leu Thr Leu Leu Phe Gly Thr Ser Ile Val | |
| | 165 |
| Gly Pro Gly Leu Val Ile Gly Leu Leu Tyr Ile Arg Leu Ala Arg Ala | |
| | 180 |
| Tyr Trp Leu Ser Gln Gln Ala Ser Phe Lys Gln Thr Arg Arg Leu Pro | |
| | 195 |
| Asn Pro Arg Val Leu Tyr Leu Ile Leu Gly Ile Val Leu Leu Phe Trp | |
| | 210 |
| Ala Cys Phe Leu Pro Phe Val Ala Met Ala Ala Gly Pro Val Pro | |
| | 225 |
| Pro Gly His Ala Thr Asp Thr Arg Ala Ala Arg Ile Ile Asn Tyr Leu | |
| | 245 |
| | 250 |
| | 255 |

Thr Ala Cys Leu Thr Tyr Gly Asn Ser Cys Ile Asn Pro Phe Leu Tyr
 260 265 270
 Thr Leu Leu Thr Lys Asn Tyr Arg Glu Tyr Leu Arg Gly Arg Gln Arg
 275 280 285
 Ser Leu Gly Ser Ser Cys Arg Gly Pro Gly Ser Ala
 290 295 300

<210> 2339

<211> 340

<212> PRT

<213> Mus musculus (M51 8076974-22-383-3835 1573-554)

<220>

<221> VARIANT

<222> (1)...(340)

<223> Xaa = Any Amino Acid

<400> 2339

Cys Leu Phe Phe Pro Gln Arg Asn Leu Asp Ala Met Asn Arg Ser Ala
 1 5 10 15
 Ala His Val Thr Glu Phe Val Leu Leu Gly Phe Pro Gly Ser Trp Lys
 20 25 30
 Ile Gln Ile Phe Leu Phe Val Leu Phe Leu Val Phe Tyr Val Leu Thr
 35 40 45
 Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg
 50 55 60
 Leu His Thr Pro Met Tyr Phe Leu Leu Gly Asn Phe Ala Phe Leu Glu
 65 70 75 80
 Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn Ile Leu Ala Asn Ile Leu
 85 90 95
 Ser Lys Thr Lys Ala Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr
 100 105 110
 Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys Leu Phe Leu Ala Val Met
 115 120 125
 Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Thr
 130 135 140
 Ile Met Thr Arg Arg Leu Cys Cys Ile Leu Val Ser Ser Cys Trp Leu
 145 150 155 160
 Ile Gly Phe Leu Gly Tyr Pro Ile Pro Ile Phe Ser Ile Ser Gln Leu
 165 170 175
 Pro Phe Cys Gly Ser Asn Ile Ile Asp His Phe Leu Cys Asp Met Asp
 180 185 190
 Pro Leu Met Ala Leu Ser Cys Ala Pro Ala Pro Ile Thr Glu Phe Ile
 195 200 205
 Phe Tyr Ala Gln Ser Ser Phe Val Leu Phe Phe Thr Ile Ala Tyr Ile
 210 215 220
 Leu Arg Ser Tyr Ile Leu Leu Leu Arg Ala Val Phe Gln Val Pro Ser
 225 230 235 240
 Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val
 245 250 255
 Val Val Ser Leu Phe Tyr Gly Thr Val Met Val Met Tyr Val Ser Pro
 260 265 270
 Thr Tyr Gly Ile Pro Ile Leu Met Gln Lys Ile Leu Thr Leu Val Tyr
 275 280 285
 Ser Val Met Thr Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn
 290 295 300
 Lys Asp Met Lys Leu Ala Leu Arg Asn Val Leu Leu Gly Met Arg Ile
 305 310 315 320
 Val Lys Asn Met Xaa Val Lys Ala Val Ser Tyr Ser His Val Leu Ile
 325 330 335
 Lys Asn Lys Leu

340

<210> 2340
 <211> 325
 <212> PRT
 <213> Mus musculus (M57 8218295-1-14626-16881 1501-527)

<220>
 <221> VARIANT
 <222> (1)...(325)
 <223> Xaa = Any Amino Acid

<400> 2340
 Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
 1 5 10 15
 Leu Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
 20 25 30
 Val Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
 35 40 45
 Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
 50 55 60
 Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val
 65 70 75 80
 Thr Leu Pro Lys Met Leu Gln Asn Leu Leu Ser Thr Asn Lys Ala Ile
 85 90 95
 Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
 100 105 110
 Ser Thr Glu Ala Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
 115 120 125
 Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
 130 135 140
 Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala
 145 150 155 160
 Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
 165 170 175
 His Val His His Phe Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
 180 185 190
 Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
 195 200 205
 Thr Ile Ala Leu Thr Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
 210 215 220
 Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
 225 230 235 240
 Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Leu
 245 250 255
 Tyr Val Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
 260 265 270
 Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
 275 280 285
 Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
 290 295 300
 Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Phe Glu Glu Ile Xaa
 305 310 315 320
 Ile Thr Leu Leu Trp
 325

<210> 2341
 <211> 177
 <212> PRT
 <213> Mus musculus (M63 8218295-1-78460-79066 2-526)

<220>

<221> VARIANT

<222> (1)...(177)

<223> Xaa = Any Amino Acid

<400> 2341

```

Val Ser Ala His Val Cys Met Gly Cys Xaa Leu Ser Trp Pro Val Arg
 1           5           10           15
Cys Glu Ile Ile Phe Gly Val Met His Thr Thr Val Asn Phe Ser Ile
      20           25           30
Val Leu Cys Gly Thr Ser Val Ile His Xaa Phe Cys Asp Val Leu Leu
      35           40           45
Val Leu Lys Leu Ser Cys Leu Tyr Asp His Val Ser Glu Ile Ala Ile
      50           55           60
Ser Asp Phe Ser Ile Ser Leu Ala Phe Phe Cys Phe Ile Ser Pro Asn
      65           70           75           80
Phe Thr Tyr Val His Ile Phe Ser Thr Glu Leu Arg Met Pro Phe Val
      85           90           95
Glu Gly Lys Thr Ser Val Phe Ser Thr Cys Leu Cys His Met Thr Ser
      100           105           110
Ile Leu Phe Ile Pro Thr Gly Ile Phe Glu Phe Leu Arg Ser His Thr
      115           120           125
Glu Ser Ser Thr Ser Leu Asp Phe Ile Leu Asn Phe Ser Tyr Phe Ser
      130           135           140
Leu Ser Thr Leu Asn Pro Gly Ile Tyr Ser Leu Arg Asn Glu Ala Val
      145           150           155           160
Asp Thr Val Gln Arg Lys Ile Phe Phe Phe Lys Glu Lys Tyr Leu Phe
      165           170           175
Leu

```

<210> 2342

<211> 314

<212> PRT

<213> Mus musculus (M65 8218295-1-89089-90071 35-969)

<220>

<221> VARIANT

<222> (1)...(314)

<223> Xaa = Any Amino Acid

<400> 2342

```

Ser Leu Phe Tyr Ser Gln Arg Ser Arg Met Asn Val Ala Asn Phe Thr
 1           5           10           15
Ala Met Thr Ile Phe Leu Leu Leu Met Gly Phe Ser Arg Asn Ser Gln
      20           25           30
Val Glu Ile Ile Phe Ser Thr Leu Ala Leu Val Val Leu Ile Gly Thr
      35           40           45
Ile Ser Ile Val Ala Val Thr Ser Leu Ser Ile Arg Leu Cys Ser Leu
      50           55           60
Met Pro Phe Leu Leu Ile His Leu Phe Cys Phe Asp Val Cys Tyr Ile
      65           70           75           80
Ser Val Met Met Pro Lys Ser Val Cys Ser Ser Phe Met Tyr Ser Ala
      85           90           95
Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Val Phe Tyr Ser Gln Ser
      100           105           110
Ser Tyr Thr Ala Met Ala Ile Leu Thr Val Met Ser Tyr Asp Cys Tyr
      115           120           125
Met Ala Val Trp His Lys Val Ile Thr Asn Val Ser Thr Cys Ile His
      130           135           140
Gly Val Leu Ala Val Leu Val Asn Gly Cys Glu Ile Ile Phe Gly Val

```

| | | | | | | |
|---|---|-----|-----|-----|-----|-----|
| 145 | | 150 | | 155 | | 160 |
| Met His Thr Thr | Leu Thr Phe Ser Ile Tyr Ile Cys Gly Thr Ser Thr | | | | | |
| | 165 | | 170 | | 175 | |
| Ile Arg Xaa Phe Cys Asp Val Leu Leu Val Leu Lys Leu Ser Phe Thr | | | | | | |
| | 180 | | 185 | | 190 | |
| Asn Asp His Val Asn Glu Leu Glu Ser Leu Ala Phe Ser Ser Val Glu | | | | | | |
| | 195 | | 200 | | 205 | |
| Gly Arg Thr Lys Ser Phe Ser Thr Cys Leu Gly His Val Ser Val Gly | | | | | | |
| | 210 | | 215 | | 220 | |
| Ser Leu Phe Asn Pro Pro Gly Val Phe Glu Phe Leu Asn Pro Tyr Ser | | | | | | |
| | 225 | | 230 | | 235 | |
| Glu Ser Pro Thr Ser Leu Asp Ile Ile Val Thr Val Phe Ile Leu Pro | | | | | | |
| | 245 | | 250 | | 255 | |
| Gln Thr Leu Ser Val Glu Ile Tyr Ser Leu Ser Asn Glu Ala Ile Asp | | | | | | |
| | 260 | | 265 | | 270 | |
| Thr Ala Xaa Arg Lys Phe Phe Phe Gln Arg Lys Thr Ser Leu Ser Ile | | | | | | |
| | 275 | | 280 | | 285 | |
| Leu His Tyr Phe Leu Leu Gly Ser His Ile Xaa Xaa Val Leu Arg Lys | | | | | | |
| | 290 | | 295 | | 300 | |
| Thr Thr Val Ser Met Asn Gln Leu Lys Leu | | | | | | |
| 305 | | 310 | | | | |

<210> 2343

<211> 335

<212> PRT

<213> Mus musculus (M70 8439670-95-9581-11872 695-1697)

<220>

<221> VARIANT

<222> (1)...(335)

<223> Xaa = Any Amino Acid

<400> 2343

| | | | | | | | | | | | | | | |
|---|-----|----|--|--|----|----|--|--|--|--|--|-----|--|-----|
| His Asp His Pro Ser Ala Glu Val Gly Gly Ala Met Ala Asn Ser Thr | | | | | | | | | | | | | | |
| 1 | | 5 | | | | 10 | | | | | | 15 | | |
| Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp Ala Cys Glu Leu | | | | | | | | | | | | | | |
| | 20 | | | | | 25 | | | | | | 30 | | |
| Gln Val Leu Ile Phe Leu Gly Phe Leu Leu Thr Tyr Phe Leu Ile Leu | | | | | | | | | | | | | | |
| | 35 | | | | 40 | | | | | | | 45 | | |
| Leu Gly Asn Phe Leu Ile Ile Phe Ile Thr Leu Val Asp Arg Arg Leu | | | | | | | | | | | | | | |
| | 50 | | | | 55 | | | | | | | 60 | | |
| Tyr Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe Ala Met Leu Glu Ile | | | | | | | | | | | | | | |
| | 65 | | | | 70 | | | | | | | 75 | | 80 |
| Trp Phe Thr Ser Val Ile Phe Pro Lys Met Leu Thr Asn Ile Ile Thr | | | | | | | | | | | | | | |
| | | 85 | | | | | | | | | | 90 | | 95 |
| Gly His Lys Thr Ile Ser Leu Leu Gly Cys Phe Leu Gln Ala Phe Leu | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | 105 | | 110 |
| Tyr Phe Phe Leu Gly Thr Thr Glu Phe Phe Leu Leu Ala Val Met Ser | | | | | | | | | | | | | | |
| | 115 | | | | | | | | | | | 120 | | 125 |
| Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Ala Thr Ile | | | | | | | | | | | | | | |
| | 130 | | | | | | | | | | | 135 | | 140 |
| Met Ser Lys Arg Val Cys Val Gln Leu Val Phe Cys Ser Trp Met Ser | | | | | | | | | | | | | | |
| | 145 | | | | | | | | | | | 150 | | 155 |
| Gly Leu Leu Leu Ile Ile Val Pro Ser Ser Ile Val Phe Gln Gln Pro | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 165 | | 170 |
| Phe Cys Gly Pro Asn Ile Ile Asn His Phe Phe Cys Asp Asn Phe Pro | | | | | | | | | | | | | | |
| | 180 | | | | | | | | | | | 185 | | 190 |
| Leu Met Glu Leu Ile Cys Ala Asp Thr Ser Leu Val Glu Phe Leu Gly | | | | | | | | | | | | | | |
| | 195 | | | | | | | | | | | 200 | | 205 |
| Phe Val Ile Ala Asn Phe Ser Leu Leu Gly Thr Leu Ala Val Thr Ala | | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | 215 | | 220 |

Thr Cys Tyr Gly His Ile Leu Tyr Thr Ile Leu His Ile Pro Ser Ala
 225 230 235 240
 Lys Glu Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Val
 245 250 255
 Val Ser Leu Phe Tyr Gly Ser Cys Ile Phe Met Tyr Val Arg Ser Gly
 260 265 270
 Lys Asn Gly Gln Gly Glu Asp His Asn Lys Val Val Ala Leu Leu Asn
 275 280 285
 Thr Val Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn
 290 295 300
 Lys Gln Val Lys Gln Val Phe Arg Glu His Val Ser Lys Phe Gln Lys
 305 310 315 320
 Phe Ser Gln Thr Xaa Arg Lys Ala Pro Leu Gln Thr Cys Leu Thr
 325 330 335

<210> 2344

<211> 139

<212> PRT

<213> Mus musculus (M71 8439670-97-10488-11856 213-627)

<220>

<221> VARIANT

<222> (1)...(139)

<223> Xaa = Any Amino Acid

<400> 2344

Ser Ile Val Cys Ser Leu Ser Leu Ser Phe Phe Leu Ser Phe Phe Leu
 1 5 10 15
 Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Leu
 20 25 30
 Ser Leu Ser Leu Ser Leu Ser Leu Ser Phe Phe Leu Ser Phe Phe Leu
 35 40 45
 Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Leu Pro Thr Phe Pro Pro
 50 55 60
 Ser Leu Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu
 65 70 75 80
 Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu
 85 90 95
 Ser Phe Phe Leu Ser Ser Leu Ser Phe Leu Ser Phe Tyr Ile Tyr Xaa
 100 105 110
 Trp Leu Val Cys Gly Pro Leu Pro Ser Xaa Gly Thr Val Gly Lys Gln
 115 120 125
 Ser Cys Val Met Met Leu Ile Cys Ser Trp Leu
 130 135

<210> 2345

<211> 331

<212> PRT

<213> Mus musculus (M72 8439916-11-1-1677 434-1425)

<220>

<221> VARIANT

<222> (1)...(331)

<223> Xaa = Any Amino Acid

<400> 2345

Phe Leu Leu Ala Trp Val His Arg Phe Leu Xaa Arg Arg Met Gly Phe
 1 5 10 15
 Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly Leu Thr Lys
 20 25 30
 Glu Ser Asp Leu Gln Cys Pro Leu Phe Ile Leu Phe Leu Met Met Tyr

```
<210> 2346
<211> 333
<212> PRT
<213> Mus musculus (M73 8439916-12-562-4356 2317-1320)
```

```
<220>
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
```

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 2346 | | | | | | | | | | | | | | | |
| Ile | Ser | Leu | Ile | Ser | Phe | Ile | Ser | Thr | Asp | Ser | Thr | Xaa | Arg | Arg | Met |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Val | Thr | Asn | Gly | Ser | Leu | Val | Thr | Glu | Phe | Ile | Leu | Leu | Gly | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Asp | Asn | Pro | Asp | Leu | Gln | Ile | Pro | Leu | Phe | Leu | Val | Phe | Leu | Val |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Met | Tyr | Met | Ile | Thr | Ala | Phe | Gly | Asn | Leu | Thr | Leu | Ile | Leu | Leu | Thr |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Val | Leu | Asn | Ser | His | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Phe | Asn |
| 65 | | | | 70 | | | | | | 75 | | | | 80 | |
| Leu | Ser | Phe | Ile | Asp | Leu | Cys | Tyr | Ser | Ser | Val | Val | Thr | Pro | Lys | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |

Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly Cys
 100 105 110
 Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys Tyr
 115 120 125
 Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
 130 135 140
 Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu Met
 145 150 155 160
 Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr Gly
 165 170 175
 Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His Tyr
 180 185 190
 Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr Tyr
 195 200 205
 Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr Val
 210 215 220
 Pro Ser Ile Val Ile Ile Ile Ser Tyr Gly Phe Ile Leu Ser Asn Ile
 225 230 235 240
 Leu Gln Ile Lys Ser Thr Gly Gly Arg Ser Lys Ala Phe Asn Thr Cys
 245 250 255
 Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala Phe
 260 265 270
 Met Tyr Leu Lys Pro Pro Ser Ala Gly Ser Leu Asn Glu Gly Lys Val
 275 280 285
 Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile
 290 295 300
 Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr Leu
 305 310 315 320
 Ser Arg Arg Lys Phe Xaa Xaa Xaa Ile Tyr Tyr Leu Cys
 325 330

<210> 2347

<211> 343

<212> PRT

<213> Mus musculus (M74 8439916-15-1-3070 860-1887)

<220>

<221> VARIANT

<222> (1)...(343)

<223> Xaa = Any Amino Acid

<400> 2347

Phe Ser Phe Ile Phe Phe Val Ser Thr Asp Ser Leu Arg Glu Asp Met
 1 5 10 15
 Thr Phe Glu Asn Ala Ser Met Val Ile Glu Phe Ile Leu Leu Gly Ile
 20 25 30
 Thr Asp Gln Pro Asp Leu Lys Ile Pro Phe Phe Leu Leu Phe Val
 35 40 45
 Gly Tyr Met Ile Thr Val Leu Gly Asn Leu Thr Leu Ile Ile Leu Ile
 50 55 60
 Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Leu Leu Phe Asn
 65 70 75 80
 Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met
 85 90 95
 Leu Met Ser Phe Ile Gln Lys Lys Asn Ile Ile Ser Tyr Thr Gly Cys
 100 105 110
 Met Ile Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys Tyr
 115 120 125
 Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
 130 135 140
 Leu Leu Tyr Asn Val Thr Leu Ser Ser Lys Val Cys Cys Tyr Leu Met

```

145          150          155          160
Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr Gly
          165          170          175
Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His Tyr
          180          185          190
Phe Cys Asp Leu Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr Tyr
          195          200          205
Ile Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile Val
          210          215          220
Pro Thr Ile Ile Ile Phe Ile Ser Tyr Gly Phe Ile Leu Phe Ser Val
225          230          235          240
Leu Lys Ile Lys Ser Thr Glu Ser Arg Ser Lys Ala Phe Ser Thr Cys
          245          250          255
Ser Ser His Met Leu Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe
          260          265          270
Met Tyr Leu Lys Pro Thr Ser Ala Leu Ser Ile Asn Lys Gly Lys Phe
          275          280          285
Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile
          290          295          300
Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Arg Lys Thr Leu
305          310          315          320
Asn Arg Arg Ile Phe Ser Ser Xaa Thr Gly Tyr Leu Xaa Ala Tyr Thr
          325          330          335
Xaa Thr Ile Glu Arg Leu Cys
          340

```

<210> 2348

<211> 321

<212> PRT

<213> Mus musculus (M75 8439916-16-717-3690 2556-1594)

<220>

<221> VARIANT

<222> (1)...(321)

<223> Xaa = Any Amino Acid

<400> 2348

```

Lys Lys Met Ala Ser Ala Asn Val Ser Leu Val Thr Glu Phe Ile Leu
1      5      10      15
Val Gly Leu Thr Asn Gln Pro Asp Leu Gln Ile Pro Leu Phe Phe Val
20     25     30
Phe Leu Ile Met Tyr Ile Val Thr Ala Leu Gly Asn Leu Cys Leu Ile
35     40     45
Ile Leu Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe
50     55     60
Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Phe Thr
65     70     75     80
Pro Lys Met Leu Met Asn Phe Ile Leu Ser Lys Asn Ala Ile Ser Tyr
85     90     95
Met Gly Cys Leu Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser
100    105    110
Glu Cys Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile
115    120    125
Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Leu Cys Leu
130    135    140
Asn Leu Met Leu Gly Thr Tyr Ala Met Ala Phe Ser Gly Ala Met Ala
145    150    155    160
His Thr Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile
165    170    175
Asn His Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr
180    185    190

```

Ser Thr Tyr Val Asn Glu Leu Val Val Phe Ile Val Val Gly Ile Asn
 195 200 205
 Ile Ile Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu
 210 215 220
 Ser Ser Ile Phe His Ile Lys Ser Asn Glu Gly Arg Ser Lys Ala Phe
 225 230 235 240
 Ser Thr Cys Ser Ser His Ile Ile Ala Val Cys Leu Phe Phe Gly Ser
 245 250 255
 Gly Ala Phe Met Tyr Leu Lys Pro Ser Ser Ser Ser Met Asp Gln
 260 265 270
 Gly Lys Thr Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn
 275 280 285
 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Arg
 290 295 300
 Lys Thr Leu Ser Arg Trp Lys Phe Xaa Lys Glu Thr Thr Cys Thr Cys
 305 310 315 320
 Leu

<210> 2349

<211> 217

<212> PRT

<213> Mus musculus (M76 8439916-16-8665-10443 1774-1125)

<220>

<221> VARIANT

<222> (1)...(217)

<223> Xaa = Any Amino Acid

<400> 2349

Phe Leu Thr Phe Leu Pro Leu Leu Pro Phe Leu Ser Phe Phe Leu Ser
 1 5 10 15
 Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Glu Cys
 20 25 30
 Cys Val Leu Thr Ser Met Ala Tyr Asp Ser Ile Cys Asn Pro Leu Leu
 35 40 45
 Tyr Asn Leu Phe Met Ser Pro Lys Xaa Cys Leu Asn Leu Ile Leu Gly
 50 55 60
 Ser Phe Phe Ile Ser Phe Ser Asp Ala Val Ala His Ser Thr Cys Arg
 65 70 75 80
 Leu Lys Leu Thr Phe Cys Asp Cys Asp Ile Pro Pro Leu Leu Gln Leu
 85 90 95
 Cys Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ile Phe Phe Val Val
 100 105 110
 Gly Cys Ile Asn Ile Ile Val Pro Ser Ser Thr Ile Leu Ile Ser Tyr
 115 120 125
 Asp Phe Ile Leu Ser Ser Met Phe Cys Ile Lys Ser Ser Glu Gly Arg
 130 135 140
 Ser Lys Ala Phe Ser Thr Tyr Ser Ser His Val Ile Ser Leu Ser Leu
 145 150 155 160
 Phe Phe Asp Ser Ser Ala Phe Val Tyr Phe Lys Ser Ser Ser Ala Gly
 165 170 175
 Ser Leu Gly Glu Glu Asn Ile Ser Ser Val Phe Tyr Ser Asn Val Val
 180 185 190
 Leu Ile Val Asn Pro Leu Leu Tyr Ser Leu Arg Asn Lys Asp Ser Leu
 195 200 205
 Arg Lys Thr Leu Thr Arg Lys Asn Phe
 210 215

<210> 2350

<211> 333

<212> PRT

<213> Mus musculus (M77 8439916-17-1-2001 619-1618)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

<400> 2350

```

Ile Ile Leu Xaa Tyr Asn Ser Phe Phe Leu Ser Leu Xaa Ile Pro Leu
 1           5           10           15
Lys Arg Met Asp Ser Val Asn Val Ser Leu Val Thr Glu Phe Leu Leu
          20           25           30
Val Gly Leu Thr His Gln Pro Asp Arg Gln Ile Pro Leu Phe Leu Leu
          35           40           45
Phe Leu Ala Met Tyr Leu Val Thr Ala Leu Gly Asn Leu Gly Leu Ile
          50           55           60
Ile Leu Val Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe
65           70           75           80
Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser Val Phe Thr
          85           90           95
Pro Lys Met Leu Met Asn Phe Ile Leu Arg Gln Asn Ala Ile Ser Tyr
          100          105          110
Met Gln Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Val Ser
          115          120          125
Glu Cys Phe Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile
          130          135          140
Cys Asn Pro Leu Leu Tyr Asn Val Met Ile Ser Pro Gln Val Cys Leu
145          150          155          160
Asn Leu Met Ile Gly Ser Tyr Leu Met Ala Phe Ser Glu Ala Val Ala
          165          170          175
Leu Thr Val Cys Met Leu Thr Leu Thr Phe Cys Asp Gly Asn Ile Asn
          180          185          190
His Tyr Phe Cys Asp Ile Leu Ala Leu Phe Gln Leu Ser Cys Ser Ser
          195          200          205
Thr Tyr Val Asn Lys Leu Val Ala Tyr Val Ile Val Val Ile Asn Ile
          210          215          220
Leu Phe Ser Thr Pro Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser
225          230          235          240
Ser Ile Phe Arg Ile Ser Ser Ser Lys Gly Arg Ser Lys Ala Phe Ser
          245          250          255
Thr Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly
          260          265          270
Ala Phe Val Tyr Phe Lys Pro Ser Ser Pro Gly Ser Met Glu Trp Ala
          275          280          285
Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro
          290          295          300
Leu Ile Tyr Ser Leu Lys Asn Lys Asp Val Lys Ile Ala Leu Arg Lys
305          310          315          320
Ser Leu Ala Arg Xaa Arg Phe Asp Trp Ile His Met Tyr
          325          330

```

<210> 2351

<211> 299

<212> PRT

<213> Mus musculus (M78 8439916-17-6970-9135 1261-2156)

<220>

<221> VARIANT

<222> (1)...(299)

<223> Xaa = Any Amino Acid

<400> 2351

Thr Asp Ser Pro Xaa Arg Arg Met Asp Xaa Val Asn Ile Ser Leu Val
 1 5 10 15
 Thr Glu Phe Ile Val Val Gly Xaa Ala Glu Gln Pro Asp Leu Gln Ile
 20 25 30
 Pro Met Phe Phe Gly Phe Leu Ala Met Tyr Thr Val Thr Ala Leu Glu
 35 40 45
 Asn Leu Phe Leu Ile Ile Leu Thr Val Leu Asn Ser His Val His Thr
 50 55 60
 Thr Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Val Val Leu Cys Tyr
 65 70 75 80
 Ser Ser Val Phe Thr Pro Gln Met Leu Met Asn Phe Ile Ile Arg Lys
 85 90 95
 Asn Thr Ile Ser Tyr Met Glu Cys Ile Thr Xaa Leu Phe Phe Leu Ser
 100 105 110
 Phe Phe Leu Ile Phe Leu Cys Phe Phe Leu Ser Ser Phe Phe Leu Ser
 115 120 125
 Phe Phe Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe
 130 135 140
 Phe Leu Ser Ser Phe Leu Pro Ser Leu Leu Pro Ser Phe Leu Ser Phe
 145 150 155 160
 Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Leu Ser Phe
 165 170 175
 Leu Ser Ala Ala Tyr Xaa Leu Gln Cys Ala Met Ile Ser Ile Cys Asn
 180 185 190
 Ser Leu Val Tyr Asn Leu Phe Met Arg Pro Xaa Val Leu Ser Glu Pro
 195 200 205
 Tyr Ser Trp Val Ile Leu Xaa Phe Ile Tyr Xaa Cys Val Asn Thr Leu
 210 215 220
 Ser Ser Gly Ile Glu Thr Asp Thr Val Arg Arg Glu Thr Ser Cys Leu
 225 230 235 240
 Arg Val Arg Pro Ala Ala Pro Gly His Met Ser Val Ser Leu Glu Phe
 245 250 255
 Phe Phe Cys Ser Gly Arg Val Tyr Leu Trp Gly Leu Pro Gln Thr Glu
 260 265 270
 Leu Ile Pro Tyr Ala Xaa Leu Pro Val Gln Arg Pro Pro Val Leu Glu
 275 280 285
 Glu Ser Leu Glu Gly Arg Arg Ala Arg Asn Val
 290 295

<210> 2352

<211> 339

<212> PRT

<213> Mus musculus (M80 8439916-20-13750-16634 2033-1016)

<220>

<221> VARIANT

<222>. (1)... (339)

<223> Xaa = Any Amino Acid

<400> 2352

Cys His Ser Phe Phe Leu Leu Leu Ile His Arg Leu Phe Xaa Arg Arg
 1 5 10 15
 Met Gly Val Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Gln Gly
 20 25 30
 Leu Thr Ser Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu
 35 40 45
 Leu Ile Tyr Thr Thr Thr Ala Leu Gly Asn Leu Ser Leu Ile Thr Leu
 50 55 60
 Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Asn | Leu | Ser | Phe | Ile | Asp | Leu | Cys | Tyr | Ser | Ser | Val | Ile | Thr | Pro | Lys |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Met | Leu | Met | Asn | Phe | Leu | Val | Ser | Lys | Asn | Phe | Ile | Ser | Tyr | Val | Gly |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Cys | Met | Thr | Gln | Leu | Tyr | Leu | Phe | Val | Phe | Phe | Ala | Val | Ser | Glu | Cys |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Cys | Val | Leu | Ser | Ser | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Asn |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Pro | Leu | Leu | Tyr | Asn | Ile | Ala | Met | Ser | Pro | Gln | Val | Cys | Ser | Tyr | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Met | Leu | Gly | Ser | Tyr | Ile | Met | Gly | Phe | Ser | Gly | Ala | Met | Ile | His | Thr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Gly | Trp | Met | Leu | Arg | Leu | Thr | Phe | Cys | Asp | Arg | Ser | Ile | Ile | Asn | His |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Tyr | Phe | Cys | Asp | Leu | Leu | Pro | Leu | Leu | Gln | Leu | Ser | Cys | Thr | Asn | Thr |
| | | 195 | | | | 200 | | | | | | 205 | | | |
| Tyr | Ala | Asn | Glu | Ile | Glu | Ile | Ile | Ile | Val | Gly | Gly | Ile | Asp | Ile | Ile |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Val | Pro | Ser | Ile | Ile | Ile | Phe | Thr | Ser | Tyr | Gly | Phe | Val | Leu | Ser | Asn |
| 225 | | | | | 230 | | | | | 235 | | | | 240 | |
| Ile | Phe | Gln | Met | Arg | Ser | Thr | Glu | Gly | Arg | Ser | Lys | Ala | Phe | Ser | Thr |
| | | | 245 | | | | | 250 | | | | | | 255 | |
| Cys | Ser | Ser | His | Ile | Val | Ala | Val | Ser | Leu | Phe | Phe | Gly | Ser | Gly | Ala |
| | | | 260 | | | | 265 | | | | | 270 | | | |
| Phe | Met | Tyr | Leu | Gln | Pro | Ser | Ser | Pro | Glu | Ser | Met | Asp | Gln | Gly | Lys |
| | | 275 | | | | 280 | | | | | | 285 | | | |
| Arg | Ser | Ser | Val | Phe | Tyr | Thr | Ile | Leu | Val | Pro | Met | Met | Asn | Pro | Leu |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Val | Lys | Ile | Ala | Leu | Lys | Lys | Thr |
| 305 | | | | | 310 | | | | 315 | | | | | 320 | |
| Phe | Ser | Thr | Gln | Ser | Val | Xaa | Xaa | Glu | Ile | Asn | Val | Tyr | His | Tyr | Thr |
| | | | 325 | | | | | 330 | | | | | 335 | | |
| Tyr | Ala | Asn | | | | | | | | | | | | | |

<210> 2353

<211> 336

<212> PRT

<213> Mus musculus (M82 8439916-21-1-3132 1296-290)

<220>

<221> VARIANT

<222> (1)...(336)

<223> Xaa = Any Amino Acid

<400> 2353

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Phe | Ile | Phe | Phe | Leu | Pro | Ile | Asp | Ser | Leu | Arg | Glu | Asp | Met | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Glu | Asn | Ala | Ser | Leu | Val | Thr | Glu | Phe | Ile | Leu | Met | Gly | Leu | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Asn | Arg | Pro | Asp | Leu | Gln | Ile | Pro | Leu | Phe | Leu | Leu | Phe | Leu | Val | Met |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Tyr | Val | Ile | Ala | Thr | Leu | Gly | Asn | Leu | Ala | Leu | Ile | Met | Leu | Ile | Ile |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Asn | Ser | His | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Leu | Asn | Leu |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Ser | Cys | Ile | Asp | Leu | Phe | Tyr | Cys | Ser | Val | Ile | Thr | Pro | Lys | Met | Leu |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Met | Asn | Phe | Val | Leu | Lys | Lys | Asn | Val | Ile | Ser | Tyr | Glu | Gly | Cys | Met |
| | | | 100 | | | | 105 | | | | | | 110 | | |

Ala Gln Phe Tyr Phe Phe Ala Phe Phe Ala Ile Ser Glu Cys Tyr Val
 115 120 125
 Leu Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
 130 135 140
 Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Ser Tyr Leu Met Met
 145 150 155 160
 Gly Thr Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr Gly Cys
 165 170 175
 Ile Leu Arg Leu Thr Phe Cys Asp Lys Asn Thr Ile Asn His Tyr Phe
 180 185 190
 Cys Asp Ile Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr Tyr Val
 195 200 205
 Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile Val Pro
 210 215 220
 Thr Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Ser Ile Leu
 225 230 235 240
 Lys Ile Ser Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr Cys Ser
 245 250 255
 Ser His Ile Ile Ala Leu Cys Leu Phe Phe Gly Ser Cys Thr Phe Met
 260 265 270
 Tyr Leu Lys Pro Ser Ser Val Glu Ser Met Asp Gln Gly Lys Ile Ser
 275 280 285
 Ser Val Phe Tyr Asn Ile Val Val Pro Leu Met Asn Pro Leu Ile Tyr
 290 295 300
 Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Ile Lys Lys Thr Ile Thr
 305 310 315 320
 Lys Gly Lys Phe Xaa Ser Glu Phe Val Ile Leu Phe Thr Phe Ser Tyr
 325 330 335

<210> 2354

<211> 316

<212> PRT

<213> Mus musculus (M84 8439916-22-16651-22211 2487-1540)

<400> 2354

Met Ala Leu Ala Asn Gly Ser Phe Val Thr Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Leu Thr Asp Gln Pro Asp Leu Gln Met Pro Leu Phe Leu Ile Phe Leu
 20 25 30
 Ile Ile Tyr Leu Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Ile Leu
 35 40 45
 Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
 50 55 60
 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Leu Ile Thr Pro Lys
 65 70 75 80
 Met Leu Met Asn Phe Val Leu Glu Lys Asn Ile Ile Ser Tyr Met Gly
 85 90 95
 Cys Met Thr Gln Phe Tyr Phe Phe Gly Phe Phe Ala Ile Ser Glu Cys
 100 105 110
 Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125
 Pro Leu Leu Tyr Ser Val Ala Met Ser Pro Lys Met Cys Ser Tyr Phe
 130 135 140
 Ile Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr
 145 150 155 160
 Gly Cys Val Met Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
 165 170 175
 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr
 180 185 190
 Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Thr Gly Lys Asp Ile Ile
 195 200 205

Val Pro Thr Val Ile Ile Phe Ala Ser Tyr Gly Phe Ile Leu Ser Asn
 210 215 220
 Ile Leu Lys Ile Arg Ser Thr Ser Gly Arg Ser Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Ile Ile Ala Val Ser Met Phe Phe Gly Ser Ser Ala
 245 250 255
 Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Met Asn Glu Ala Lys
 260 265 270
 Phe Ser Ser Ile Phe Tyr Ser Ile Val Val Pro Met Met Asn Pro Leu
 275 280 285
 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Gly Leu Lys Lys Thr
 290 295 300
 Leu Ser Arg Met Phe Ser His Asn Leu Ile Ser Leu
 305 310 315

<210> 2355

<211> 239

<212> PRT

<213> Mus musculus (M90 8567804-15-6071-7402 605-1319)

<220>

<221> VARIANT

<222> (1)...(239)

<223> Xaa = Any Amino Acid

<400> 2355

Asn Thr Glu Gly His Ser Leu Ile Leu Thr Tyr Asn Val Ser Asn Thr
 1 5 10 15
 Gln Ile Asn Cys Phe Cys Leu Ile Tyr Thr Xaa Tyr Asn Leu Leu Xaa
 20 25 30
 Phe Leu Glu Ile Tyr Phe Cys Pro Leu Leu Ile Pro Cys Val Ala Glu
 35 40 45
 Trp Ser Arg Gly Asp Cys Ile Glu Ile Leu Glu Tyr Asn Ile Cys Ile
 50 55 60
 Phe Ile Lys Leu Met Val Pro Thr Met Ser Ser Leu His Tyr Leu Met
 65 70 75 80
 Asn Ser Ser Val Xaa Tyr Leu Lys Ile Phe His Val Ser Lys Glu Leu
 85 90 95
 Tyr Gly Ser Phe Leu Gly Gly Ile Phe Phe Leu Ala Asn His Cys Arg
 100 105 110
 Glu Ile Glu Ile Ser Asn Arg Thr Thr Glu Met Arg Ile Lys Ala Leu
 115 120 125
 Gln Lys Gly Leu Arg Asp Ile Ser Phe Ile Thr Asn Ser Val Gly Ile
 130 135 140
 Val Ile Leu Ile Ile Ile Tyr Ala Arg Leu Gln Lys Ser Thr Glu Gly
 145 150 155 160
 Thr Val Lys Thr Ser Ser Asn Cys Gly Tyr His Ile Ile Ser Ile Tyr
 165 170 175
 Leu Phe Phe Leu Lys Phe Ala Phe Leu Tyr Ile Phe Lys Tyr Val Ser
 180 185 190
 Arg Met His Gln Gly Ser Val Ser Ser Val Phe Tyr Thr Asn Val Val
 195 200 205
 Pro Ile Cys Asn Thr Leu Ile Tyr Ser Leu Xaa Asn Asp Val Thr Ile
 210 215 220
 Ala Trp Met Asn Val Leu Met Lys Phe Gln Arg His Leu Phe Tyr
 225 230 235

<210> 2356

<211> 202

<212> PRT

<213> Mus musculus (M96 8567804-8-3023-3783 759-153)

<220>

<221> VARIANT

<222> (1)...(202)

<223> Xaa = Any Amino Acid

<400> 2356

```

Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe
 1           5           10           15
Phe Gln Phe Leu Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly
 20           25           30
Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr
 35           40           45
Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala
 50           55           60
Ile Thr Pro Lys Met Leu Val Gly Phe Val Asn Gln Asn Ile Ile Ala
 65           70           75           80
His Ala Glu Cys Leu Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Leu
 85           90           95
Asp Glu Cys Tyr Ile Cys Thr Glu Met Ala Tyr Asp Arg Tyr Ala Ala
 100          105          110
Ile Cys Lys Thr Leu Leu Asn Gln Val Thr Met Ser His Gln Val Cys
 115          120          125
Leu Glu Ile Thr Lys Gly Trp Ile Ile Leu Tyr Ser Glu Met Glu Lys
 130          135          140
Ser Lys Lys Ser Phe Xaa Met Tyr Ile Ser Ile Leu Leu Phe Phe Ser
 145          150          155          160
Leu Phe Gly Asp Ile Ile Ser Leu Lys Ser Phe Met Leu Ser Lys Cys
 165          170          175
Leu Thr Thr Asp Leu His Leu Lys Ser Arg His Ile Cys Lys Phe Cys
 180          185          190
Val Ala Val Ser Asp Asn Val Leu Leu Leu
 195          200

```

<210> 2357

<211> 123

<212> PRT

<213> Mus musculus (M98 8570471-14-891-2711 1429-1795)

<220>

<221> VARIANT

<222> (1)...(123)

<223> Xaa = Any Amino Acid

<400> 2357

```

Leu Cys Gly Ser Gly Thr Leu Ile Phe Ser Ser Glu Met Leu Phe Ile
 1           5           10           15
Phe Leu Gly Lys Xaa Phe Phe Gly Xaa Xaa Asp Leu Ile Val Ala Ile
 20           25           30
Phe Cys Ile Phe Asn Phe Leu Lys Leu Ser Leu Leu Thr Lys Val Pro
 35           40           45
Glu Cys Asp Phe Xaa Asn Lys Leu Ser Xaa Xaa Asn Glu Tyr Ile Xaa
 50           55           60
Asn Ile Val Pro Asp Ser Tyr Xaa Tyr Arg Asn Leu Tyr Trp Gly Asn
 65           70           75           80
Gly Asn Met Ser Ser Thr Gly Cys Met Leu Arg Leu Thr Ser Trp Asp
 85           90           95
Gly Asn Thr Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Phe Leu Gln
 100          105          110
Leu Ser Cys Thr Ser Thr Tyr Val His Tyr Thr
 115          120

```

<210> 2358
 <211> 179
 <212> PRT
 <213> Mus musculus (M99 8570471-17-1-2939 17-553)

<220>
 <221> VARIANT
 <222> (1)...(179)
 <223> Xaa = Any Amino Acid

<400> 2358
 Ile Cys Leu Asn Leu Met Leu Val Ser Tyr Phe Ile Ala Phe Ser Glu
 1 5 10 15
 Ser Val Ala His Thr Ala Cys Met Leu Arg Leu Thr Phe Cys Asp Ala
 20 25 30
 Asn Thr Ile Asn Tyr Tyr Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu
 35 40 45
 Ser Cys Thr Thr Thr Arg Val Asn Glu Val Val Ile Phe Val Val Gly
 50 55 60
 Ser Ile Asn Ile Ile Ile Pro Thr Ser Thr Ile Phe Val Ser Tyr Gly
 65 70 75 80
 Phe Ile Leu Ser Ser Ile Phe Leu Ile Thr Ala Ser Glu Gly Arg Ser
 85 90 95
 Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Ala Ala Phe Leu Phe
 100 105 110
 Phe Gly Ser Gly Ala Ile Arg Tyr Phe Lys Pro Ser Ser Asp Gly Ser
 115 120 125
 Met Asp Glu Gly Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Ile Pro
 130 135 140
 Met Ile Asn Pro Leu Leu Tyr Ser Leu Arg Asn Lys Asp Ile Lys Val
 145 150 155 160
 Ala Leu Arg Arg Thr Leu Arg Lys Arg Asn Phe Xaa Leu Ser Ser Val
 165 170 175
 Val Cys Val

<210> 2359
 <211> 324
 <212> PRT
 <213> Mus musculus (M100 8570471-17-6599-8104 424-1396)

<220>
 <221> VARIANT
 <222> (1)...(324)
 <223> Xaa = Any Amino Acid

<400> 2359
 Ile Phe Cys Val Tyr Arg Phe Ser Gln Arg Arg Met Asp Ser Val Asn
 1 5 10 15
 Ile Ser Leu Val Thr Glu Phe Ile Leu Val Gly Leu Thr Asp Lys Pro
 20 25 30
 Tyr Leu Gln Ile Pro Leu Phe Phe Ile Phe Leu Ala Met Tyr Leu Val
 35 40 45
 Thr Ala Leu Gly Asn Leu Ser Leu Ile Ile Leu Thr Val Leu Asn Ser
 50 55 60
 His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Val
 65 70 75 80
 Asp Phe Cys Tyr Ser Ser Val Phe Thr Pro Gln Met Leu Met Asn Phe
 85 90 95
 Ile Thr Arg Lys Asn Thr Ile Ser Tyr Met Glu Cys Met Ser Gln Leu

```
<210> 2360
<211> 327
<212> PRT
<213> Mus musculus (M101 8570471-19-17517-20152 1114-134)
```

```
<220>
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
```

1421

Leu Met Gly Phe Ser Gly Ala Met Ile His Thr Gly Cys Val Leu Arg
 165 170 175
 Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Phe Cys Asp Leu
 180 185 190
 Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Ile
 195 200 205
 Glu Val Leu Ile Val Ala Gly Lys Asp Ile Ile Val Pro Thr Val Ile
 210 215 220
 Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser Ile Phe Gln Met Lys
 225 230 235 240
 Ser Thr Lys Gly Met Ser Lys Ala Phe Ser Thr Cys Ser Ser His Ile
 245 250 255
 Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe Met Tyr Leu Lys
 260 265 270
 Pro Asn Ser Thr Gly Thr Met Asn Asn Gly Lys Ile Pro Ser Ile Ile
 275 280 285
 Tyr Thr Ile Leu Ile Pro Met Met Asn Pro Leu Ile Tyr Ser Leu Arg
 290 295 300
 Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu Arg Lys Lys Ile
 305 310 315 320
 Leu Xaa Ser Glu Thr Val Ile
 325

<210> 2361

<211> 341

<212> PRT

<213> Mus musculus (M104 8570471-3-1-2271 2172-1151)

<220>

<221> VARIANT

<222> (1)...(341)

<223> Xaa = Any Amino Acid

<400> 2361

Asn Phe Ala Ile Phe Phe Ser Val His Arg Phe Ser Xaa Arg Arg Met
 1 5 10 15
 Ala Leu Val Asn Gly Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu
 20 25 30
 Thr Asp Gln Pro Gly Leu Gln Met Pro Leu Phe Leu Leu Phe Leu Leu
 35 40 45
 Met Tyr Met Ile Thr Val Phe Gly Asn Leu Thr Leu Ile Phe Leu Ile
 50 55 60
 Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu Asn
 65 70 75 80
 Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met
 85 90 95
 Leu Met Asn Phe Ile Leu Lys Lys Asn Leu Ile Ser Tyr Met Gly Cys
 100 105 110
 Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Ile Ile Ser Glu Cys Tyr
 115 120 125
 Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
 130 135 140
 Leu Leu Tyr Asn Thr Ala Met Ser Pro Arg Val Cys Ser Tyr Leu Met
 145 150 155 160
 Leu Gly Thr Tyr Leu Met Gly Phe Phe Asp Ala Met Ile His Thr Gly
 165 170 175
 Cys Met Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His Tyr
 180 185 190
 Phe Cys Asp Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr
 195 200 205
 Val Asn Glu Thr Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Ile Leu

| | | |
|---|-----|-----|
| 210 | 215 | 220 |
| Pro Ser Ala Ile Ile Phe Phe Ser Tyr Gly Phe Ile Leu Ser Asn Ile | | |
| 225 | 230 | 235 |
| Phe Gln Ile Arg Ser Thr Leu Gly Arg Ser Lys Ala Phe Ser Thr Cys | | 240 |
| | 245 | 250 |
| Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Gly Phe | | 255 |
| | 260 | 265 |
| Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Ile Asp Gln Gly Lys Ile | | 270 |
| | 275 | 280 |
| Ser Ser Ile Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile | | 285 |
| | 290 | 295 |
| Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu | | 300 |
| 305 | 310 | 315 |
| Ser Arg Arg Lys Phe Leu Lys Val Xaa Leu Gln Ser Arg His Phe Leu | | 320 |
| | 325 | 330 |
| Cys Xaa Cys Thr Tyr | | 335 |
| | 340 | |

<210> 2362

<211> 337

<212> PRT

<213> Mus musculus (M106 8570471-9-3672-5945 1670-660)

<220>

<221> VARIANT

<222> (1)...(337)

<223> Xaa = Any Amino Acid

<400> 2362

| | | |
|---|-----|-----|
| Ile Asn Ile Phe Phe Leu Leu Pro Thr Xaa Asn Met Gln Val Gln Met | | |
| 1 | 5 | 10 |
| Ala Asp Thr Asn His Ser Thr Val Thr Glu Phe Ile Leu Ala Gly Leu | | 15 |
| | 20 | 25 |
| Thr Asp Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu Gly | | 30 |
| | 35 | 40 |
| Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu Ile | | 45 |
| | 50 | 55 |
| Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Ser | | 60 |
| 65 | 70 | 75 |
| Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys Met | | 80 |
| | 85 | 90 |
| Leu Val Asn Phe Val Ala Lys Lys Asn Val Ile Ser Tyr Glu Glu Cys | | 95 |
| | 100 | 105 |
| Met Thr Gln Leu Tyr Phe Phe Leu Ala Phe Val Ile Ser Glu Cys His | | 110 |
| | 115 | 120 |
| Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro | | 125 |
| | 130 | 135 |
| Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Cys Ser Trp Met Val | | 140 |
| 145 | 150 | 155 |
| Gly Gly Val Tyr Gly Met Gly Leu Ile Gly Ala Ala Val His Thr Leu | | 160 |
| | 165 | 170 |
| Cys Met Leu Arg Val Val Phe Cys Lys Ala Asn Ile Ile Asn His Tyr | | 175 |
| | 180 | 185 |
| Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala Cys Ser Ser Thr Tyr | | 190 |
| | 195 | 200 |
| Val Asn Glu Val Val Leu Leu Cys Leu Ser Ala Phe Asn Ile Phe Ile | | 205 |
| | 210 | 215 |
| Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe Ile Ile Ile Ser Ile | | 220 |
| 225 | 230 | 235 |
| Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys | | 240 |
| | 245 | 250 |
| | | 255 |

Ser Ser His Phe Ser Ala Val Ser Val Phe Phe Gly Ser Leu Ala Phe
 260 265 270
 Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys Asp Lys Gly Lys Val
 275 280 285
 Ser Ser Val Phe Tyr Thr Thr Ile Val Pro Met Leu Asn Pro Met Ile
 290 295 300
 Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala Leu Asn Lys Leu Phe
 305 310 315 320
 Gln Lys Lys Phe His Val Xaa Arg Ser Ile Tyr Leu Arg Lys Thr Ile
 325 330 335
 Gln

<210> 2363

<211> 256

<212> PRT

<213> Mus musculus (M107 8571727-11-1262-2044 781-16)

<220>

<221> VARIANT

<222> (1)...(256)

<223> Xaa = Any Amino Acid

<400> 2363

Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe
 1 5 10 15
 Phe Gln Phe Leu Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly
 20 25 30
 Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr
 35 40 45
 Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala
 50 55 60
 Ile Thr Pro Lys Met Leu Val Gly Phe Val Asn Gln Asn Ile Ile Ala
 65 70 75 80
 His Ala Glu Cys Leu Thr Gln Leu Phe Phe Cys Phe Phe Val Leu
 85 90 95
 Asp Glu Cys Tyr Ile Cys Thr Glu Met Ala Tyr Asp Arg Tyr Ala Ala
 100 105 110
 Ile Cys Lys Thr Leu Leu Asn Gln Val Thr Met Ser His Gln Val Cys
 115 120 125
 Leu Gly Asn His Lys Arg Leu Asp Tyr Ile Ile Phe Arg Asn Gly Lys
 130 135 140
 Ile Lys Lys Ile Phe Leu Asn Val His Ile Tyr Phe Ile Ile Phe Xaa
 145 150 155 160
 Phe Val Cys Gly Thr Ser Tyr Pro Xaa Ser Leu Ser Cys Xaa Ala Ser
 165 170 175
 Val Xaa Pro Leu Thr Tyr Ile Leu Arg Val Gly Thr Phe Val Ser Phe
 180 185 190
 Val Trp Leu Ser Gln Thr Met Ser Tyr Tyr Phe Ile Ile Ala Asn Leu
 195 200 205
 Trp Asp Asn Leu Xaa Glu Ser Ser Phe Xaa Arg Leu Ile Cys Cys Ser
 210 215 220
 Lys Gly Xaa Ser Lys Glu Gly Lys Xaa Lys Leu Leu Ser Phe Trp Ser
 225 230 235 240
 Phe Phe Ile Val Leu Lys Gln Phe Arg Lys Glu Gly Leu Thr Ser Tyr
 245 250 255

<210> 2364

<211> 333

<212> PRT

<213> Mus musculus (M111 8571727-21-4956-7261 1151-153)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

<400> 2364

```

Ile Leu Met Leu Xaa Leu Leu Leu Phe Leu Gln Glu Arg Met Val Leu
 1           5           10           15
Glu Asn Ser Ser Ser Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln
          20           25           30
Gln Pro Glu Leu Gln Met Pro Leu Phe Phe Leu Phe Leu Gly Ile Tyr
          35           40           45
Ile Val Ser Met Val Gly Asn Leu Gly Leu Thr Val Leu Ile Val Leu
          50           55           60
Asn Pro His Leu His Asn Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser
65           70           75           80
Phe Thr Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Arg Met Leu Val
          85           90           95
Gly Phe Val Lys Gln Asn Thr Ile Ser His Ala Glu Cys Met Thr Gln
          100          105          110
His Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr Ile Leu Thr
          115          120          125
Ala Val Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro Leu Leu Tyr
          130          135          140
Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr Val Gly Val
145          150          155          160
Tyr Val Met Gly Phe Leu Glu Ala Ile Ala His Thr Gly Ser Met Val
          165          170          175
Ser Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Ala Cys Asp
          180          185          190
Ile Leu Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Thr Ile Asn Glu
          195          200          205
Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile Val Pro Thr Leu
          210          215          220
Thr Ile Phe Ile Ser Tyr Thr Leu Ile Leu Ser Asn Ile Leu Ser Ile
225          230          235          240
His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Gly Ser His
          245          250          255
Val Ile Ala Val Ser Leu Phe Phe Gly Ala Ala Ala Phe Met Tyr Leu
          260          265          270
Lys Pro Ser Ser Ala Ser Glu Asp Asp Lys Val Ser Thr Ile Phe
          275          280          285
Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg
          290          295          300
Asn Lys Asp Val Tyr Leu Ala Leu Arg Lys Thr Leu Met Lys Arg Ser
305          310          315          320
Phe Thr Xaa Val Glu Ser Ile Phe Val Met Glu Leu Lys
          325          330

```

<210> 2365

<211> 344

<212> PRT

<213> Mus musculus (M112 8571727-22-3043-8090 3092-2061)

<220>

<221> VARIANT

<222> (1)...(344)

<223> Xaa = Any Amino Acid

<400> 2365

Ile Val Cys Phe Ile Ser Leu Phe Xaa Val Met Ser Gln Lys Arg Met
 1 5 10 15
 Ala Pro Arg Asn Ser Ser Ser Val Thr Glu Phe Ile Leu Val Gly Phe
 20 25 30
 Ser Asn Gln Pro Ala Leu Gln Leu Pro Leu Phe Phe Val Phe Leu Gly
 35 40 45
 Ile Tyr Val Leu Thr Val Ile Gly Asn Leu Gly Leu Ile Thr Leu Ile
 50 55 60
 Gly Leu Asn Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
 65 70 75 80
 Leu Ser Phe Ile Asp Phe Cys Tyr Ser Cys Val Phe Thr Pro Lys Met
 85 90 95
 Leu Ser Asp Phe Val Ser Glu Asn Ile Ile Ser Tyr Met Gly Cys Met
 100 105 110
 Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu Cys Tyr Val
 115 120 125
 Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
 130 135 140
 Leu Tyr Thr Val Thr Met Ser Pro Gln Val Cys Thr Leu Leu Met Phe
 145 150 155 160
 Cys Ser Tyr Val Ile Gly Phe Ala Gly Ala Met Ala His Thr Gly Ser
 165 170 175
 Met Leu Thr Leu Thr Phe Cys Asp Ser Asn Met Ile His His Tyr Leu
 180 185 190
 Cys Glu Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Ala
 195 200 205
 Asn Glu Leu Val Phe Phe Ile Val Val Gly Val Val Ile Thr Ala Ser
 210 215 220
 Ser Ile Ser Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Asn Ile Leu
 225 230 235 240
 Lys Ile Pro Ser Ala Glu Gly Arg Ser Lys Ala Phe Gly Thr Trp Gly
 245 250 255
 Ser His Val Val Ala Val Ala Leu Phe Phe Gly Ser Gly Ala Phe Thr
 260 265 270
 Tyr Leu Thr Thr Ser Phe Pro Gly Ser Met Glu Glu Gly Arg Phe Ala
 275 280 285
 Ser Val Phe Tyr Thr Asn Val Val Pro Met Leu Asn Pro Leu Ile Tyr
 290 295 300
 Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Asn Lys Thr Leu Lys
 305 310 315 320
 Arg Val Leu Phe Xaa Xaa Val Trp Cys Tyr His Trp Asn Xaa Ile Leu
 325 330 335
 Gly Lys His Thr Gln Ile His Phe
 340

<210> 2366

<211> 157

<212> PRT

<213> Mus musculus (M113 8571727-23-1650-2708 1059-589)

<220>

<221> VARIANT

<222> (1)...(157)

<223> Xaa = Any Amino Acid

<400>2366

Ile Arg Phe Ala Gly Ser Ser Val His Thr Gly Cys Val Phe Leu Xaa
 1 5 10 15
 Gly His Ala Ile Asn His Xaa Leu Phe Asn Ile Leu Thr Leu Leu Gln
 20 25 30
 Leu Ser Xaa Ala Thr Thr Tyr Val Asn Val Val Ile Leu Ile Gly Val

```

      35              40              45
Tyr Ile Thr Val Pro Ser Phe Thr Ile Leu Ile Ser Tyr Val Phe Ile
  50              55              60
Phe Ile Asn Ile Leu Asn Ile Lys Ser Met Gln Arg Ile Ser Lys Asp
  65              70              75              80
Phe Ser Ile Cys Arg Phe His Ile Ala Ser Ile Tyr Val Phe Ile Glu
      85              90              95
Phe Thr Ala Phe Lys Cys Phe Lys Tyr Ser Tyr Gly Ser Ile Asp Gln
      100              105              110
Gly Phe Tyr Ser Ser Val Phe Tyr Thr Asp Val Ile Leu Ile Leu Asn
      115              120              125
Ile Ile Ile Tyr Ser Met Cys Ile Met Asp Val Glu Met Ala Leu Met
      130              135              140
Asp Ala Leu Met Lys Phe Gln Arg Asn Val Phe His Leu
  145              150              155

```

<210> 2367

<211> 127

<212> PRT

<213> Mus musculus (M114 8571727-23-3031-3453 387-9)

<220>

<221> VARIANT

<222> (1)...(127)

<223> Xaa = Any Amino Acid

<400>2367

```

His Ser Ile Gln Tyr Leu Asn Leu Ile Asn Leu Ser Tyr Ile Asp Leu
  1              5              10              15
Cys Tyr Ser Ser Val Pro Arg Ser Lys Met Leu Met Asn Phe Val Phe
      20              25              30
Glu Lys Asn Ala Ile Ser Phe Val Gly Cys Asp Ser Ile Gln Phe Ser
      35              40              45
Leu Val Pro Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe
      50              55              60
Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Val Ile Phe
  65              70              75              80
Xaa Tyr Tyr Thr Leu Thr Ser Met Ala Tyr Asp Phe Tyr Val Ala Ile
      85              90              95
Cys Ser Ser Leu Val His Xaa Val Thr Pro Leu Leu Gln Val Cys Phe
      100              105              110
Phe Ser Phe Leu Leu Leu Phe Phe Cys Pro Leu Phe Pro Met
      115              120              125

```

<210> 2368

<211> 133

<212> PRT

<213> Mus musculus (M115 8571727-24-1-1404 400-2)

<400>2368

```

Cys Asn Val Ile Thr Phe Thr Val Leu Thr Asp Met Asn Trp Gly Arg
  1              5              10              15
Met Ala Leu Gly Asn Asp Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
      20              25              30
Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Phe Leu
      35              40              45
Gly Val Tyr Ile Phe Ser Val Val Gly Asn Leu Gly Leu Ile Val Leu
      50              55              60
Ile Val Leu Asn Pro His Leu Gln Thr Pro Met Tyr Tyr Phe Leu Phe
  65              70              75              80
Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys

```

<210> 2369
<211> 262
<212> PRT
<213> Mus musculus (M117 8571727-26-4808-6724 1497-715)

```
<220>  
<221> VARIANT  
<222> (1)...(262)  
<223> Xaa = Any Amino Acid
```

```
<210> 2370
<211> 329
<212> PRT
<213> Mus musculus (M119 8573058-17-2172-5249 1514-528)
```

1428

<222> (1)...(329)

<223> Xaa = Any Amino Acid

<400>2370

Val Met Leu Leu Ala Phe Leu Leu Pro Thr Asp Asp Thr Ile Met His
 1 5 10 15
 Met Ala Met Glu Asn Asp Ser Ser Val Thr Glu Phe Val Phe Met Gly
 20 25 30
 Leu Thr Glu Gln Pro Glu Leu Arg Leu Pro Leu Phe Phe Val Phe Leu
 35 40 45
 Leu Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Ser Leu Met Val Leu
 50 55 60
 Ile Cys Leu Asn Ser His Leu His Asn Pro Met Tyr Phe Phe Leu Phe
 65 70 75 80
 Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Phe Val Cys Thr Pro Lys
 85 90 95
 Met Leu Met Gly Phe Val Ser Glu Lys Ser Ile Ile Ser Tyr Thr Gly
 100 105 110
 Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu Cys
 115 120 125
 Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
 130 135 140
 Pro Leu Val Tyr Ala Ile Leu Met Ser Pro Arg Met Cys Ser Leu Leu
 145 150 155 160
 Met Ile Gly Ser Tyr Leu Met Gly Phe Ala Ser Ala Met Ala His Thr
 165 170 175
 Gly Cys Met Ile Arg Leu Lys Phe Cys Asp Ser Asn Ile Ile Asn His
 180 185 190
 Tyr Met Cys Glu Ile Phe Pro Leu Leu Gln Leu Ser Cys Ser Ser Thr
 195 200 205
 Tyr Ala Asn Glu Leu Val Ser Ser Leu Ile Ala Cys Ile Val Val Ile
 210 215 220
 Val Ser Gly Leu Val Ile Leu Met Ser Tyr Ala Ser Ile Leu Leu Asn
 225 230 235 240
 Val Val Gln Met Ser Ser Ala Thr Gly Trp Ser Lys Ala Met Gly Thr
 245 250 255
 Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly Leu
 260 265 270
 Leu Thr Tyr Val Lys Pro Ala Ser Ala Glu Ser Val Asp Gln Gly Lys
 275 280 285
 Phe Phe Ser Val Phe Tyr Thr Leu Met Val Pro Met Leu Asn Pro Leu
 290 295 300
 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Ala Lys Arg Thr
 305 310 315 320
 Met Asn Arg Ile Thr Ile Xaa Gly Lys
 325

<210> 2371

<211> 335

<212> PRT

<213> Mus musculus (M122 8573058-3-1-3007 1710-2714)

<220>

<221> VARIANT

<222> (1)...(335)

<223> Xaa = Any Amino Acid

<400>2371

Val Leu Ile Leu Pro Leu His Leu Phe Leu Gln Met Ser Leu Asn Ala
 1 5 10 15
 Gln Lys Thr Met Glu Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met

```
<210> 2372
<211> 131
<212> PRT
<213> Mus musculus (M123 8573058-5-4486-4920 411-18)
```

```
<220>  
<221> VARIANT  
<222> (1)...(131)  
<223> Xaa = Any Amino Acid
```

| | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400>2372 | | | | | | | | | | | | | | | |
| Leu | Gly | Gly | Glu | Asp | Arg | Phe | Ser | Leu | Asn | Asn | Glu | Ser | Leu | Ile | Asn |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Ser | Gly | Leu | Val | Pro | Cys | Thr | Phe | His | Ile | Leu | Thr | Ser | Phe | Cys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Lys | Ser | Arg | Ser | Xaa | Thr | Phe | Arg | Thr | Cys | Gly | Ser | His | Phe | Ile | Ala |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Val | Ser | Leu | Phe | Tyr | Gly | Ala | Ser | Ala | Phe | Met | Tyr | Leu | Lys | Pro | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Ala | Ser | Val | Asp | Asp | Asp | Lys | Ile | Ser | Thr | Ile | Phe | Tyr | Thr | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp
 85 90 95
 Val His Ile Ala Leu Arg Lys Tyr Phe Glu Glu Lys Ser Phe Ile Xaa
 100 105 110
 Glu Glu Leu Xaa Leu Ile Xaa Met Glu Asn Leu Met Val Cys Gln Ile
 115 120 125
 Tyr Asn Phe
 130

<210> 2373

<211> 167

<212> PRT

<213> Mus musculus (M124 8573058-8-1-894 16-516)

<400>2373

Leu Thr His Gly Ser Thr Pro Thr Gly Pro Ile Thr Ala Pro Ala Leu
 1 5 10 15
 Thr Val Cys Met Val Trp Leu Gln Phe Leu Asp Ser Pro Leu Thr Thr
 20 25 30
 Pro Tyr Met Cys His Ile Phe Pro Leu Leu Gln Val Ser Cys Ser Ser
 35 40 45
 Pro Tyr Val Asn Gln Leu Met Ser Tyr Ile Ala Val Gly Thr Ala Ile
 50 55 60
 Ile Leu Cys Ser Leu Ile Ile Leu Val Ser Tyr Ala Met Ile Leu Phe
 65 70 75 80
 Asn Ile Ile His Ile Ser Ser Gly Lys Gly Trp Ser Lys Ala Leu Gly
 85 90 95
 Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly
 100 105 110
 Leu Leu Ala Tyr Val Asn Pro Ser Ser Ala Glu Thr Val Gly Gln Ala
 115 120 125
 Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu Asn Pro
 130 135 140
 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Met Lys Lys
 145 150 155 160
 Ser Trp Lys Arg Ile Thr Ser
 165

<210> 2374

<211> 337

<212> PRT

<213> Mus musculus (M126 8574266-10-448-5833 4192-5202)

<220>

<221> VARIANT

<222> (1)...(337)

<223> Xaa = Any Amino Acid

<400>2374

Leu Phe Ser Ser Cys Tyr His Lys Phe Ile Cys Lys Met Thr Ala Arg
 1 5 10 15
 Asn Met Thr Thr Met Ser Gly Phe Leu Leu Met Gly Phe Ser Asp Asn
 20 25 30
 His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu Leu Thr Tyr Leu
 35 40 45
 Leu Gly Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile Thr Thr Leu Asp
 50 55 60
 Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys Gln Leu Ser Thr
 65 70 75 80
 Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln Tyr Val Ala Ser
 85 90 95

Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln Cys Met Leu Gln
 100 105 110
 Ile Phe Phe Phe Thr Gly Leu Ala Trp Ser Glu Met Ala Thr Leu Thr
 115 120 125
 Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr
 130 135 140
 Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala Val Ala Ala Val
 145 150 155 160
 Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr Ala Ser Thr Leu
 165 170 175
 Ser Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln Phe Phe Cys Asp
 180 185 190
 Ile Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp Tyr Phe Gly Val
 195 200 205
 Leu Glu Val Ser Thr Phe Met Ser Val Met Ala Phe Ala Cys Phe Val
 210 215 220
 Gly Ile Ala Phe Ser Tyr Gly Gln Ile Phe Ser Thr Val Leu Arg Met
 225 230 235 240
 Pro Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr Cys Leu Pro His
 245 250 255
 Leu Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ile Cys Ala Tyr Leu
 260 265 270
 Lys Pro Thr Ser Asp Ser Pro Thr Ala Leu Asp Leu Met Leu Ser Ile
 275 280 285
 Phe Tyr Thr Leu Leu Pro Pro Thr Leu Asn Pro Val Ile Tyr Ser Leu
 290 295 300
 Arg Asn Glu Ser Leu Lys Arg Ala Leu Lys Lys Leu Leu Leu Ser Glu
 305 310 315 320
 Glu Phe Ile Arg Lys Lys Cys Leu Phe Tyr Phe Xaa Cys Leu Leu Thr
 325 330 335
 Leu

<210> 2375

<211> 333

<212> PRT

<213> Mus musculus (M127 8574266-13-1078-2817 1563-564)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

<400>2375

Leu Ser Phe Leu Ser Gly Asp Glu Tyr Gln Leu Leu Ser Val Gln Glu
 1 5 10 15
 Asn Ser Leu Ser Val Lys Arg Phe Ala Phe Ser Lys Phe Ser Glu Val
 20 25 30
 Pro Gly Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu Met Phe Leu
 35 40 45
 Val Ser Leu Thr Gly Asn Glu Leu Ile Val Ile Ala Ile Cys Thr Ser
 50 55 60
 Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu
 65 70 75 80
 Leu Glu Ile Gly Tyr Thr Cys Ser Val Ile Pro Lys Met Leu Gln Ser
 85 90 95
 Leu Val Ser Glu Ala Arg Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln
 100 105 110
 Met Phe Phe Thr Phe Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala
 115 120 125
 Ala Met Ala Tyr Asp Arg Cys Met Ala Ile Cys Ser Pro Leu His Tyr


```

130          135          140
Ala Thr Arg Met Ser His Gly Val Cys Ala His Leu Ala Ile Val Ser
145          150          155          160
Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn Phe Ile Phe
          165          170          175
Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe Phe Cys Asp
          180          185          190
Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu
          195          200          205
Ala Ala Ile Phe Val Ala Ala Ile Leu Cys Ile Ser Ser Pro Phe Leu
210          215          220
Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Val Ala Val Leu Val Met
225          230          235          240
Pro Ser Pro Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ser Ser His
          245          250          255
Leu Leu Val Val Thr Leu Phe Phe Gly Ser Gly Ser Ile Thr Tyr Leu
          260          265          270
Arg Pro Lys Ser Ser His Leu Pro Gly Met Asp Lys Leu Leu Ala Leu
          275          280          285
Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile Tyr Ser Leu
          290          295          300
Arg Asn Lys Glu Val Lys Thr Ala Leu Arg Lys Thr Leu Ser Leu Lys
305          310          315          320
Thr Ser Arg Ala Ile Asn Arg Xaa Gln Asn Leu Ala Glu
          325          330

```

<210> 2376

<211> 356

<212> PRT

<213> Mus musculus (M129 8574266-7-9797-11994 2006-942)

<220>

<221> VARIANT

<222> (1)...(356)

<223> Xaa = Any Amino Acid

<400>2376

```

Asn Phe Phe Leu Gln Ile Xaa Ser Gln Asn Tyr Gln Xaa Gly Xaa Leu
1      5      10      15
Lys Glu Ile Met Thr Lys Ser Asn Phe Ser Ser Pro Ile Cys Phe Arg
20     25     30
Leu Pro Gly Phe Ser Asp His Leu Xaa Leu Asp Xaa Thr Leu Phe Leu
35     40     45
Ala Thr Ser Val Ile Asp Ile Val Met Leu Thr Gln Asn Thr Met Ile
50     55     60
Ile Leu Val Ser Phe Leu Asn Ser Arg Leu Gln Thr Pro Met Tyr Phe
65     70     75     80
Phe Leu Ser Asn Phe Phe Phe Leu Asp Leu Cys Phe Met Thr Asn Val
85     90     95
Leu Xaa Ile Val Xaa Thr Ser Lys Gly Pro Glu Lys Ile Ile Ser Cys
100    105    110
Cys Ala Ile His Val Tyr Ile Val Leu Xaa Leu Asp Phe Thr Lys Cys
115    120    125
Val Leu Leu Thr Met Met Ala Tyr Asn Pro Val Thr Pro Ile Cys Trp
130    135    140
Pro Leu Xaa Tyr Pro Thr His Pro Lys Phe Val Asp Ile His Pro
145    150    155    160
Lys Phe Pro Xaa Lys Pro Ala Ala Leu Ala Trp Ile Cys Ser Phe Met
165    170    175
Val Phe Thr Ile Gln Thr Thr Leu Val Phe Gln Leu Ser Leu Cys Ser
180    185    190

```

His His Arg Met Asn Asp Phe Leu Cys Val Arg Asn Pro Pro Leu Val
 195 200 205
 Lys Ile Thr Phe Met Asp Thr Thr Ser Leu Glu Lys His Ile Ser Val
 210 215 220
 Phe Thr Phe Leu Xaa Ala Val Ile Pro Cys Gly Glu Tyr Ser Ile Ile
 225 230 235 240
 Tyr Leu Leu Val Leu Leu Lys Val Trp Leu Lys Ile Lys Phe Thr Gly
 245 250 255
 Arg Met Lys Thr Phe Gly Ser Cys Gly Phe His Leu Met Ala Ile Val
 260 265 270
 Leu Phe Phe Gly Asn Glu Ser Ser Val Tyr Met Val Tyr Met Tyr Pro
 275 280 285
 Arg Ala Asn Ala Cys Gln Tyr Arg Lys Phe Ser Val Phe Tyr Met Ile
 290 295 300
 Val Thr Pro Ser Ile Asn Pro Leu Ile Tyr Leu Arg Asn Lys Glu Phe
 305 310 315 320
 Arg Trp Ala Val Gln Arg Leu Val Thr Arg Asp Pro Ser Xaa Gly Lys
 325 330 335
 Ile Arg Gln Ser Leu Thr Ile Phe Gln Ala Phe Gly Ile Gly Arg His
 340 345 350
 Tyr Ile Tyr Cys
 355

<210> 2377

<211> 323

<212> PRT

<213> Mus musculus (M130 8574266-9-11171-19240 5578-6546)

<400>2377

Val Arg Ile Leu Thr Val Asn Thr Asn Met Trp Ile Asn Asn Gln Ser
 1 5 10 15
 Ser Val Asp Asp Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro Trp Leu
 20 25 30
 Glu Thr Pro Leu Phe Val Ile Phe Leu Val Ala Tyr Ile Phe Ala Leu
 35 40 45
 Phe Gly Asn Ile Ser Ile Ile Leu Val Ser Arg Leu Asp Pro Gln Leu
 50 55 60
 Asp Ser Pro Met Tyr Phe Phe Val Ser Asn Leu Ser Leu Leu Asp Leu
 65 70 75 80
 Cys Tyr Thr Thr Ser Thr Val Pro Gln Met Leu Val Asn Leu Arg Gly
 85 90 95
 Pro Glu Lys Thr Ile Ser Tyr Gly Gly Cys Val Ala Gln Leu Tyr Ile
 100 105 110
 Phe Leu Ala Leu Gly Ser Thr Glu Cys Ile Leu Leu Ala Ile Met Ala
 115 120 125
 Phe Asp Arg Phe Ala Ala Ile Cys Arg Pro Leu His Tyr Pro Ile Ile
 130 135 140
 Met Asn Gln Lys Arg Cys Ile His Met Ala Thr Gly Thr Trp Ile Ser
 145 150 155 160
 Gly Phe Ala Asn Ser Leu Val Gln Ser Thr Leu Thr Val Val Ala Pro
 165 170 175
 Arg Cys Gly Gln Arg Val Ile Asp His Phe Phe Cys Glu Val Pro Ala
 180 185 190
 Leu Leu Lys Leu Ala Cys Thr Asp Thr Ser Val Asn Glu Ala Glu Leu
 195 200 205
 Asn Val Leu Gly Ala Leu Leu Leu Val Pro Leu Ser Leu Ile Leu
 210 215 220
 Gly Thr Tyr Val Phe Ile Ala Gln Ala Val Leu Lys Leu Arg Ser Ala
 225 230 235 240
 Glu Ser Arg Arg Lys Ala Phe Asn Thr Cys Ala Ser His Leu Leu Val
 245 250 255

Val Ser Leu Phe Tyr Phe Thr Ala Ile Ser Met Tyr Val Gln Pro Pro
 260 265 270
 Ser Ser Tyr Ser His Glu Arg Gly Lys Ile Met Ala Leu Phe Tyr Gly
 275 280 285
 Ile Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys
 290 295 300
 Asp Val Lys Ala Ala Leu Arg Arg Ala Leu Thr Lys Glu Phe Trp Val
 305 310 315 320
 Lys Ala Arg

<210> 2378

<211> 329

<212> PRT

<213> Mus musculus (M131 8574266-9-30686-36974 2322-3308)

<220>

<221> VARIANT

<222> (1)...(329)

<223> Xaa = Any Amino Acid

<400>2378

Leu Leu Ser Val Val Phe Phe Xaa Leu Phe Leu Asn Arg Val Ser Arg
 1 5 10 15
 Val Ile Ile Met Asn Val Ser Phe Lys Thr Gly Phe Leu Leu Met Gly
 20 25 30
 Phe Ser Asp Glu Arg Asn Leu Gln Ile Leu His Ala Val Leu Phe Leu
 35 40 45
 Ile Thr Tyr Leu Leu Ala Ile Met Gly Asn Leu Leu Ile Ile Thr Ile
 50 55 60
 Ile Thr Leu Asp Gln Arg Leu His Ser Pro Met Tyr Tyr Phe Leu Lys
 65 70 75 80
 His Leu Ser Phe Leu Asp Leu Cys Phe Ile Ser Val Thr Val Pro Gln
 85 90 95
 Ser Ile Ala Asn Ser Leu Met Asn Asn Gly Phe Ile Ser Leu Gly Gln
 100 105 110
 Cys Met Leu Gln Val Phe Phe Phe Ile Ala Leu Ala Ser Ser Glu Val
 115 120 125
 Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg
 130 135 140
 Pro Leu Gln Tyr Glu Thr Ile Met Asp Pro His Ala Cys Lys Cys Ala
 145 150 155 160
 Val Ile Ala Val Trp Met Ala Gly Gly Leu Ser Gly Leu Leu His Thr
 165 170 175
 Gly Val Asn Phe Ser Ile Pro Leu Cys Gly Lys Arg Ile Ile His Gln
 180 185 190
 Phe Phe Cys Asp Ile Pro Gln Met Leu Lys Leu Ala Cys Ser Tyr Glu
 195 200 205
 Phe Ile Asn Glu Ile Ala Val Ala Ala Phe Thr Thr Ser Thr Ala Phe
 210 215 220
 Val Cys Leu Ile Ala Ile Val Phe Ser Tyr Thr Gln Ile Phe Ser Thr
 225 230 235 240
 Val Met Arg Ile Pro Ser Ala Asp Ser Arg Thr Lys Val Phe Ser Thr
 245 250 255
 Cys Leu Pro His Leu Phe Val Val Met Phe Phe Leu Ser Ala Ala Gly
 260 265 270
 Phe Glu Phe Leu Arg Pro Pro Ser Asp Ser Leu Ser Ala Met Asp Leu
 275 280 285
 Val Phe Ser Ile Phe Tyr Thr Val Ile Pro Pro Thr Leu Asn Pro Leu
 290 295 300
 Ile Tyr Ser Leu Arg Asn Glu Ala Met Lys Ala Ala Leu Arg Lys Val

320

| | |
|-------|------|
| <210> | 2380 |
| <211> | 341 |
| <212> | PRT |

<213> Mus musculus (M133 8574277-10-1-1870 1597-577)

<220>

<221> VARIANT

<222> (1)...(341)

<223> Xaa = Any Amino Acid

<400>2380

```

Val Leu Leu Asn His Thr Phe Ile Thr Glu Phe Leu Leu Leu Gly Val
 1           5           10           15
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Met Val Leu Ala
          20           25           30
Met Tyr Phe Ile Asn Val Phe Gly Asn Gly Ala Ile Met Met Ile Val
          35           40           45
Ile Leu Asp Ser Arg Leu Tyr Ser Pro Met Tyr Phe Phe Leu Gly Asn
          50           55           60
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
          65           70           75           80
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
          85           90           95
Ile Thr Gln Leu His Phe Phe His Phe Leu Gly Cys Thr Asp Ala Leu
          100          105          110
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
          115          120          125
Leu His Tyr Pro Ser Ile Met Asn Arg Gln Val Cys Ile Gln Val Ala
          130          135          140
Ala Thr Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
          145          150          155          160
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Arg Ile His His Phe
          165          170          175
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
          180          185          190
Leu Asn Arg Trp Leu Leu Asn Thr Leu Ala Gly Thr Ile Gly Ile Gly
          195          200          205
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
          210          215          220
Phe Leu Lys Thr His Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
          225          230          235          240
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
          245          250          255
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
          260          265          270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
          275          280          285
Ile Tyr Ala Leu Arg Asn Lys Glu Val Arg Cys Ala Leu Asn Arg Lys
          290          295          300
Leu Arg Ile Leu Ile Xaa Leu Gly Arg Asn Leu Val Ser Tyr Phe Val
          305          310          315          320
Ile Ser Gln His Lys Gln Leu Leu Xaa Lys Ser Met Cys Glu Ile Ser
          325          330          335
Xaa Phe Xaa Ile Cys
          340

```

<210> 2381

<211> 284

<212> PRT

<213> Mus musculus (M136 8574277-13-1-992 974-124)

<220>

<221> VARIANT

<222> (1)...(284)

<223> Xaa = Any Amino Acid

<400>2381

Cys Ile Tyr Ile Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val
 1 5 10 15
 Cys Ile Ser Ile Cys Thr Tyr Leu His Ile Xaa Ile His Met Cys Val
 20 25 30
 Gln Val Val Ile Lys Leu Lys Val Lys Xaa Val Thr Trp Lys Glu Val
 35 40 45
 Xaa Lys Met Ser Val Glu Lys Arg Thr Gln Ser Arg Gln Lys Ser Gly
 50 55 60
 Tyr Leu Ala Asn Cys Phe Leu Gln Ser Phe Ile Leu Gly Ser Val Asp
 65 70 75 80
 Arg Asn Ile Cys Leu Leu Ile Val Met Val Tyr Asp His Tyr Leu Thr
 85 90 95
 Ile Cys His His Leu Xaa Tyr Pro Phe Leu Met Gly Pro Leu Trp Gly
 100 105 110
 Leu Gly Phe Gly Leu Thr Thr Ser Phe Val Val Asp Glu Leu Ile Val
 115 120 125
 Ala Leu Met Ala Gln Leu Arg Phe Cys Val Pro Lys Gln Ile Asp His
 130 135 140
 Phe Tyr Tyr Asp Phe Ser Pro Leu Val Val Leu Ala Tyr Thr Asp Thr
 145 150 155 160
 Gly Leu Val Gln Val Thr Thr Phe Val Leu Phe Val Val Phe Leu Thr
 165 170 175
 Val Pro Phe Gly Leu Val Leu Ile Ser Cys Ala Gln Ile Ala Val Thr
 180 185 190
 Val Leu Arg Val Pro Ser Arg Thr Arg Arg Asn Lys Ala Phe Ser Thr
 195 200 205
 Cys Ser Ser His Leu Asp Glu Val Ser Thr Phe Tyr Gly Ser Leu Met
 210 215 220
 Val Trp Tyr Thr Glu Pro Ser Ala Val His Ser Gln Ile Leu Ser Lys
 225 230 235 240
 Val Ile Ala Leu Leu Tyr Thr Val Val Thr Thr Ile Phe Asp Pro Gly
 245 250 255
 Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ser Leu Arg Arg His
 260 265 270
 Leu Tyr Cys Lys Pro Thr Glu Met Xaa Pro Lys Arg
 275 280

<210> 2382

<211> 314

<212> PRT

<213> Mus musculus (M143 8574277-22-875-4053 855-1796)

<400>2382

Tyr Pro Met Gly Ile Leu Ser Thr Gly Asn Gln Thr Val Thr Glu Phe
 1 5 10 15
 Val Leu Leu Gly Phe His Glu Val Pro Gly Leu His Leu Leu Phe Phe
 20 25 30
 Ser Val Phe Thr Ile Leu Tyr Ala Ser Ile Ile Thr Gly Asn Met Leu
 35 40 45
 Ile Ala Val Val Val Val Ser Ser Gln Arg Leu His Thr Pro Met Tyr
 50 55 60
 Phe Phe Leu Val Asn Leu Ser Phe Ile Glu Ile Val Tyr Thr Ser Thr
 65 70 75 80
 Val Val Pro Lys Met Leu Glu Gly Phe Leu Gln Glu Ala Thr Ile Ser
 85 90 95
 Val Ala Gly Cys Leu Leu Gln Phe Phe Val Phe Gly Ser Leu Ala Thr
 100 105 110
 Asp Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala

```

      115              120              125
Ile Cys His Pro Leu Arg Tyr Pro His Leu Met Gly Pro Gln Trp Cys
 130              135              140
Leu Gly Leu Val Leu Thr Val Trp Leu Ser Gly Phe Met Val Asp Gly
 145              150              155              160
Leu Val Val Ala Leu Met Ala Gln Leu Arg Phe Cys Gly Pro Asn Leu
      165              170              175
Val Asp His Phe Tyr Cys Asp Phe Ser Pro Leu Met Val Leu Ala Cys
      180              185              190
Ser Asp Thr Gln Val Ala Gln Val Thr Thr Phe Val Leu Ser Val Val
 195              200              205
Phe Leu Thr Val Pro Phe Gly Leu Val Leu Ile Ser Tyr Ala Gln Ile
 210              215              220
Val Val Thr Val Leu Arg Val Pro Ser Gly Thr Arg Arg Thr Lys Ala
 225              230              235              240
Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Ser Thr Phe Tyr Gly
      245              250              255
Thr Leu Met Val Leu Tyr Ile Val Pro Ser Ala Val His Ser Gln Leu
 260              265              270
Leu Ser Lys Val Ile Ala Leu Leu Tyr Thr Val Val Thr Pro Ile Phe
 275              280              285
Asn Pro Val Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ala Leu
 290              295              300
Arg Arg Leu Leu Tyr Cys Lys Pro Thr Glu
 305              310

```

<210> 2383

<211> 107

<212> PRT

<213> Mus musculus (M144 8574277-30-676-1123 424-104)

<220>

<221> VARIANT

<222> (1)...(107)

<223> Xaa = Any Amino Acid

<400>2383

```

Ser Gly Val Leu Gly Asn Lys Leu Ser Leu Cys Leu Xaa Val Xaa Arg
 1              5              10              15
Val Phe Phe Ser Cys Gly Xaa Val Pro Ser Ala Gln Gly Lys Arg Lys
      20              25              30
Ser Leu Ala Thr Cys Ser Ser His Leu Ser Val Val Leu Leu Phe Tyr
      35              40              45
Ser Thr Val Phe Ala Thr Tyr Leu Lys Pro Pro Ser Thr Ser His Ser
      50              55              60
Ser Ala Glu Val Val Ala Val Met Tyr Thr Leu Val Thr Pro Thr
      65              70              75              80
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ser
      85              90              95
Leu Arg Lys Ile Leu Asn Met Asp Lys Phe Gln
      100              105

```

<210> 2384

<211> 232

<212> PRT

<213> Mus musculus (M148 8574277-5-2944-4486 2-698)

<220>

<221> VARIANT

<222> (1)...(232)

<223> Xaa = Any Amino Acid

<400>2384

```

Lys Ser Leu Ala Thr Leu Ala Gly Cys Leu Leu Gln Phe Leu Thr Phe
 1           5           10           15
Thr Ser Leu Asp Ala Asp Glu Tyr Phe Leu Leu Thr Leu Met Ala His
          20          25          30
Asp His Cys Leu Ala Ile Phe Tyr Ser Leu Xaa Tyr Pro Arg Leu Met
          35          40          45
Arg Pro Gln Trp Cys Leu Gly Leu Val Ile Ile Val Trp Leu Ser Gly
          50          55          60
Phe Met Glu Ala Gly Leu Val Val Ala Leu Thr Ala Gln Leu Arg Phe
65          70          75          80
Cys Gly Pro Asn Leu Ile Asp His Phe Tyr Cys Asp Phe Ser Pro Leu
          85          90          95
Met Ile Leu Ala Cys Ser Asp Thr Xaa Val Ala Gln Met Thr Thr Phe
          100         105         110
Val Leu Phe Val Val Phe Leu Pro Val Leu Ser Gly Leu Ile Leu Met
          115         120         125
Ser Tyr Ala Gln Phe Val Val Ile Val Leu Arg Ile Pro Ser Gly Ala
          130         135         140
Arg Arg Thr Lys Ala Phe Phe Thr Cys Ser Ser His Leu Ala Met Met
145          150         155         160
Phe Thr Phe Tyr Gly Ser Leu Met Val Trp Tyr Thr Ala Pro Ser Ala
          165         170         175
Val Leu Ser Leu Gln Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Thr
          180         185         190
Val Phe Ala Pro Ile Phe Asn Ser Val Ile Tyr Thr Leu Arg Asn Leu
          195         200         205
Asp Met Gln Lys Ala Leu Arg Leu Leu Tyr Cys Lys Ser Thr Glu
          210         215         220
Met Xaa Pro Lys Lys Glu Gly Ser
225          230

```

<210> 2385

<211> 326

<212> PRT

<213> Mus musculus (M149 8574277-6-4252-5644 1059-82)

<220>

<221> VARIANT

<222> (1)...(326)

<223> Xaa = Any Amino Acid

<400>2385

```

Tyr Ile Val Phe Thr Pro Ile Ser Ser Xaa Asn Thr Arg Pro Thr Met
 1           5           10           15
Asn Cys Ser Gln Ala Pro Thr Phe Ile Leu Leu Gly Leu Ser Ser Asp
          20          25          30
Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Leu Tyr Leu
          35          40          45
Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr Asp
          50          55          60
Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu
65          70          75          80
Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu Ala
          85          90          95
Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln
          100         105         110
Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu Ala
          115         120         125
Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu Tyr

```



```

130          135          140
Pro Leu Leu Met Thr Pro Cys Arg Cys Arg Val Leu Val Ser Gly Ser
145          150          155          160
Trp Gly Val Ala His Cys Val Ser Leu Thr His Thr Leu Leu Phe Ser
          165          170          175
Lys Leu Tyr Phe His Asn Asn Gln Glu Ile Pro His Phe Phe Cys Asp
          180          185          190
Phe Gly Pro Leu Leu Leu Leu Ser Cys Ser Asp Thr Tyr Leu Asn Glu
          195          200          205
Ser Leu Met Met Ala Leu Ser Gly Leu Leu Ala Ile Ser Ala Phe Leu
          210          215          220
Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys Val
          225          230          235          240
Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ala Thr Cys Ser Ser His
          245          250          255
Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu
          260          265          270
Lys Pro Pro Ser Ser Ser His Ser Ser Gln Glu Val Val Ala Ala Val
          275          280          285
Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu
          290          295          300
Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met Val
          305          310          315          320
Lys Ser Gln Asp Xaa Gly
          325

```

<210> 2386

<211> 321

<212> PRT

<213> Mus musculus (M152 8574277-7-18987-20418 1032-73)

<220>

<221> VARIANT

<222> (1)...(321)

<223> Xaa = Any Amino Acid

<400>2386

```

Cys Gly Leu Ser Cys Ser Gln Arg Ser Arg Arg Asn Val Leu Ile Ser
1   5   10   15
Leu Xaa Xaa Leu Asn Phe Phe Leu Met Gly Phe Ser Arg Lys Leu Glu
20  25  30
Val Glu His Asn Phe Ile Leu Ala Leu Gly Leu Val Ile Leu Ile Ala
35  40  45
Asn Val Phe Ile Ile Ala Ala Ile Ser Leu Glu Tyr His Leu Cys Ser
50  55  60
Leu Arg His Phe Leu Leu Glu Gln Leu Phe Cys Leu Asp Leu Cys Tyr
65  70  75  80
Ile Ser Met Ile Val Leu Ser Thr Ile Lys Ser Ile Cys Arg Ser Phe
85  90  95
Met Tyr Ser Ala Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Gly Phe
100 105 110
Ala Phe Thr Leu Cys Ser Tyr Thr Ser Met Ala Ile Leu Thr Val Met
115 120 125
Ser Cys His Cys Tyr Val Ile Met Cys Tyr Lys Val Ile Ile Ser Val
130 135 140
Ser Leu Cys Met His Lys Val Leu Ala Val Trp Ala Ser Gly Cys Gly
145 150 155 160
Ile Asn Phe Gly Val Met His Thr Ala Val Asn Phe Ser Ile Ser Leu
165 170 175
Cys Gly Ala Ser Val Ile His Xaa Phe Cys Asn Val Leu Leu Val Leu
180 185 190

```

Lys Leu Ser Cys Ser Asn Asp Cys Val Ser Glu Leu Ser Ile Ile Gly
 195 200 205
 Phe Pro Thr Cys Arg His Phe Ile Ser Ile Ser Phe Ala Tyr Glu His
 210 215 220
 Ile Leu Ser Pro Glu Leu Arg Met Pro Ser Val Lys Gly Arg Thr Arg
 225 230 235 240
 Val Phe Ser Thr Cys Leu Cys His Ile Ser Val Val Ile Leu Phe Ile
 245 250 255
 Pro Thr Gly Val Phe Glu Phe Leu Asn Pro His Ser Lys Ser Pro Thr
 260 265 270
 Xaa Ile Leu His Xaa Thr Leu Phe Leu Val Phe His Thr Phe Leu Ser
 275 280 285
 Ser Thr Leu Asn Pro Glu Ile Asn Ser Leu Arg Asn Glu Ala Thr Glu
 290 295 300
 His His Ser Lys Glu Asn Val Ser Leu Phe Ile Ser Thr Ile Ser Ser
 305 310 315 320
 Leu

<210> 2387

<211> 327

<212> PRT

<213> Mus musculus (M154 8575572-1-103679-105172 492-1471)

<220>

<221> VARIANT

<222> (1)...(327)

<223> Xaa = Any Amino Acid

<400>2387

His Xaa Met Gly Ala Leu Asn Gln Thr Arg Val Thr Glu Phe Ile Phe
 1 5 10 15
 Leu Gly Leu Thr Asp Asn Trp Val Leu Glu Ile Leu Phe Phe Val Pro
 20 25 30
 Phe Thr Val Thr Tyr Met Leu Thr Leu Leu Gly Asn Phe Leu Ile Val
 35 40 45
 Val Thr Ile Val Phe Thr Pro Arg Leu His Asn Pro Met Tyr Phe Phe
 50 55 60
 Leu Ser Asn Leu Ser Phe Ile Asp Ile Cys His Ser Ser Val Thr Val
 65 70 75 80
 Pro Lys Met Leu Glu Gly Leu Leu Leu Glu Arg Lys Thr Ile Ser Phe
 85 90 95
 Asp Asn Cys Ile Ala Gln Leu Phe Phe Leu His Leu Phe Ala Cys Ser
 100 105 110
 Glu Ile Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile
 115 120 125
 Cys Ile Pro Leu His Tyr Ser Asn Val Met Asn Met Lys Val Cys Val
 130 135 140
 Gln Leu Val Phe Ala Leu Trp Leu Gly Gly Thr Ile His Ser Leu Val
 145 150 155 160
 Gln Thr Phe Leu Thr Ile Arg Leu Pro Tyr Cys Gly Pro Asn Ile Ile
 165 170 175
 Asp Ser Tyr Phe Cys Asp Val Pro Pro Val Ile Lys Leu Ala Cys Thr
 180 185 190
 Asp Thr Tyr Leu Thr Gly Ile Leu Ile Val Ser Asn Ser Gly Thr Ile
 195 200 205
 Ser Leu Val Cys Phe Leu Ala Leu Val Thr Ser Tyr Thr Val Ile Leu
 210 215 220
 Phe Ser Leu Arg Lys Lys Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser
 225 230 235 240
 Thr Cys Ser Ala His Phe Met Val Val Thr Leu Phe Phe Gly Pro Cys

245 250 255
 Ile Phe Leu Tyr Thr Arg Pro Asp Ser Ser Phe Ser Ile Asp Lys Val
 260 265 270
 Val Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu Ile
 275 280 285
 Tyr Thr Leu Arg Asn Glu Glu Val Lys Thr Ala Met Lys His Leu Arg
 290 295 300
 Gln Arg Arg Ile Cys Ser Xaa Asn His Val Cys Val Trp Leu Val Xaa
 305 310 315 320
 Cys Cys Asp Asn Ser His Gly
 325

<210> 2388

<211> 330

<212> PRT

<213> Mus musculus (M157 8575572-1-144835-147600 2426-1439)

<220>

<221> VARIANT

<222> (1)...(330)

<223> Xaa = Any Amino Acid

<400>2388

Met Glu Lys Ala Val Leu Ile Asn Gln Thr Ser Val Met Ser Phe Arg
 1 5 10 15
 Leu Thr Gly Leu Ser Thr Asn Pro Lys Val Gln Met Ala Ile Phe Phe
 20 25 30
 Ile Phe Leu Ile Phe Tyr Val Leu Thr Leu Val Gly Asn Ile Leu Ile
 35 40 45
 Val Val Thr Ile Ile His Asp His Arg Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Ser Asn Leu Ser Phe Ile Asp Val Cys His Ser Thr Val Thr
 65 70 75 80
 Val Pro Lys Met Leu Ser Asp Thr Phe Ser Glu Glu Lys Leu Ile Ser
 85 90 95
 Phe Asp Asp Cys Val Val Gln Ile Phe Phe Leu His Leu Phe Ala Cys
 100 105 110
 Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala
 115 120 125
 Ile Cys Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys Val Cys
 130 135 140
 Met Val Leu Gly Gly Ala Met Trp Thr Ala Gly Thr Ile His Ser Ile
 145 150 155 160
 Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asn Glu
 165 170 175
 Leu Asp Ser Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu Ala Cys
 180 185 190
 Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser Gly Met
 195 200 205
 Ile Ser Met Val Cys Phe Val Ile Ile Val Val Ser Tyr Ala Val Ile
 210 215 220
 Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu
 225 230 235 240
 Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His
 245 250 255
 Cys Ile Phe Ile Tyr Ser Arg Pro Ala Ile Ser Leu Pro Glu Asp Lys
 260 265 270
 Ile Val Ser Ala Phe Phe Thr Ala Ile Thr Pro Leu Leu Asn Pro Ile
 275 280 285
 Ile Tyr Thr Phe Arg Asn Glu Asp Met Lys Ser Ala Leu Lys Lys Leu
 290 295 300

Ile Arg Arg Lys Glu Gly Lys Glu Lys Xaa Lys Cys Ile Ser Ser Leu
 305 310 315 320
 Gly Phe Leu Val Ile Xaa Ile Lys Glu Ala
 325 330

<210> 2389

<211> 331

<212> PRT

<213> Mus musculus (M158 8575572-1-18114-22131 1498-507)

<220>

<221> VARIANT

<222> (1)...(331)

<223> Xaa = Any Amino Acid

<400>2389

Cys Leu Ser Ala Ser Leu Asp Ile Ser Lys Met Glu Arg Ile Asn Tyr
 1 5 10 15
 Thr Val Leu Thr Glu Phe Ile Leu Thr Gly Val Pro His Pro Pro Arg
 20 25 30
 Leu Arg Thr Phe Leu Phe Val Phe Phe Leu Leu Ile Tyr Ile Leu Thr
 35 40 45
 Gln Leu Gly Asn Ala Leu Ile Leu Ile Thr Val Cys Ala Asp Thr Gln
 50 55 60
 Leu His Ala Arg Pro Met Tyr Ile Phe Leu Gly Ala Leu Ser Val Ile
 65 70 75 80
 Asp Met Gly Ile Ser Thr Ile Ile Val Pro Arg Leu Met Met Asn Phe
 85 90 95
 Thr Pro Gly Ile Lys Pro Ile Pro Phe Gly Gly Cys Val Ala Gln Leu
 100 105 110
 Tyr Phe Tyr His Phe Leu Gly Ser Ser Gln Cys Phe Leu Tyr Thr Thr
 115 120 125
 Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro
 130 135 140
 Val Leu Met Ser Ala Lys Leu Ser Ile Leu Leu Val Ala Gly Ala Trp
 145 150 155 160
 Val Ala Gly Ser Ile His Gly Ala Ile Gln Ala Ile Leu Thr Phe Arg
 165 170 175
 Leu Pro Tyr Cys Gly Pro Asn Gln Val Asp Tyr Phe Phe Cys Asp Ile
 180 185 190
 Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu
 195 200 205
 Val Thr Phe Val Asp Ile Gly Val Val Val Ala Ser Cys Phe Ser Leu
 210 215 220
 Ile Leu Leu Ser Tyr Ile Tyr Ile Ile Arg Ala Ile Leu Arg Ile Arg
 225 230 235 240
 Thr Ala Asp Gly Arg Arg Arg Ala Phe Ser Thr Cys Gly Ala His Val
 245 250 255
 Thr Ile Val Thr Val Tyr Tyr Val Pro Cys Ala Phe Ile Tyr Leu Arg
 260 265 270
 Pro Asp Ser His Ser Ile Leu Asp Gly Ala Ala Ala Leu Phe Pro Thr
 275 280 285
 Ala Ile Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln
 290 295 300
 Glu Val Lys Leu Ala Leu Arg Arg Met Val Gly Ser Gln Ser Thr Lys
 305 310 315 320
 Ser Glu Val Xaa Ala Pro Leu Leu Phe Xaa Gly
 325 330

<210> 2390

<211> 324

<212> PRT

<213> Mus musculus (M160 8575572-1-54180-57203 1450-479)

<220>

<221> VARIANT

<222> (1)...(324)

<223> Xaa = Any Amino Acid

<400>2390

```

Ile Leu Thr Asp Xaa Asp Met Arg Arg Thr Arg Asn Thr Ser Leu Asp
 1          5          10          15
Ala Val Val Thr Asp Phe Leu Leu Leu Gly Leu Ala His Pro Pro Asn
 20          25          30
Leu Arg Ala Phe Leu Phe Leu Val Phe Phe Leu Ile Tyr Ile Leu Thr
 35          40          45
Gln Leu Gly Asn Leu Leu Ile Leu Leu Thr Val Trp Ala Asp Pro Lys
 50          55          60
Leu His Ala Arg Pro Met Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu
 65          70          75          80
Asp Met Trp Leu Ser Ser Val Ile Val Pro Arg Leu Ile Leu Asn Phe
 85          90          95
Thr Pro Ala Ser Lys Ala Ile Pro Phe Gly Gly Cys Val Ala Gln Leu
100          105          110
Tyr Phe Phe His Phe Leu Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu
115          120          125
Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro
130          135          140
Val Leu Met Asn Gly Lys Leu Cys Thr Ile Leu Val Ser Gly Ala Trp
145          150          155          160
Val Ala Gly Ser Ile His Gly Ser Ile Gln Thr Thr Leu Thr Phe Arg
165          170          175
Leu Pro Tyr Cys Gly Pro Asn Gln Ile Asp Tyr Phe Ile Cys Asp Ile
180          185          190
Pro Ala Val Leu Arg Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu
195          200          205
Val Thr Phe Val Asp Ile Gly Val Val Ala Ala Ser Cys Phe Met Leu
210          215          220
Ile Leu Leu Ser Tyr Ala Asn Ile Val His Ala Ile Leu Lys Ile Arg
225          230          235          240
Thr Ala Asp Gly Arg Lys Arg Ala Phe Ser Thr Cys Gly Ser His Leu
245          250          255
Thr Val Val Thr Val Tyr Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg
260          265          270
Ala Gly Ser Lys Ser Pro Phe Asp Gly Ala Val Ala Val Phe Tyr Thr
275          280          285
Val Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln
290          295          300
Glu Val Lys Ser Ala Leu Lys Arg Leu Thr Ala Gly Arg Arg Asp Val
305          310          315          320
Gly Gly Glu Lys

```

<210> 2391

<211> 329

<212> PRT

<213> Mus musculus (M162 8576192-11-46369-50310 3151-2165)

<220>

<221> VARIANT

<222> (1)...(329)

<223> Xaa = Any Amino Acid

<400>2391

```

Phe Ser Xaa Ser His Tyr Arg Gln Asn Met Thr Gly Asn Asn Gln Thr
 1           5           10           15
Leu Ile Ser Lys Phe Leu Leu Leu Gly Leu Pro Ile Leu Ser Glu Tyr
      20           25           30
His Phe Leu Phe Tyr Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Ile
      35           40           45
Leu Gly Asn Leu Leu Ile Ile Ala Leu Val Arg Leu Asp Ser His Leu
      50           55           60
His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu
      65           70           75
Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln Asn Met Gln Ser
      85           90           95
Gln Val Pro Ser Ile Ser Tyr Val Gly Cys Leu Thr Gln Leu Tyr Phe
      100          105          110
Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu Leu Val Val Met Ala
      115          120          125
Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Ile
      130          135          140
Met Ser Thr Lys Phe Cys Thr Ser Leu Val Leu Leu Trp Met Leu
      145          150          155
Thr Thr Ser Asn Ala Leu Met His Thr Leu Leu Met Ala Arg Leu Ser
      165          170          175
Phe Cys Glu Lys Asn Val Ile Leu Arg Phe Phe Cys Asp Ile Ser Ala
      180          185          190
Leu Leu Lys Leu Ser Cys Ser Asp Thr Phe Val Asn Glu Leu Met Ile
      195          200          205
Phe Ile Met Gly Gly Ile Ile Ile Ile Pro Phe Leu Leu Ile Val
      210          215          220
Met Ser Tyr Val Arg Ile Phe Phe Ser Ile Leu Lys Val Pro Ser Thr
      225          230          235
Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly Ser His Leu Ser Val
      245          250          255
Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser
      260          265          270
Ser Asn Asn Ser Thr Val Lys Glu Ser Ala Met Ala Met Met Tyr Thr
      275          280          285
Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg
      290          295          300
Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys Ser Lys Lys Ile Ser
      305          310          315
Leu Xaa Trp Lys Tyr Phe Arg Met Ile
      325

```

<210> 2392

<211> 275

<212> PRT

<213> Mus musculus (M163 8576192-5-7971-9031 1060-236)

<220>

<221> VARIANT

<222> (1)...(275)

<223> Xaa = Any Amino Acid

<400>2392

```

Ile Ile Ile Leu Ile Ile Leu Asp Phe His Leu His Thr Pro Ile Tyr
 1           5           10           15
Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
      20           25           30
Thr Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Thr Ile

```

35 40 45
 Ser Tyr Val Gly Cys Leu Thr Gln Met Tyr Phe Pro Asn Val Phe Ala
 50 55 60
 Asn Leu Glu Asn Phe Leu Leu Met Phe Met Ala Tyr Asp Arg Tyr Val
 65 70 75 80
 Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Ser Ile Met Ser Pro Ile Leu
 85 90 95
 Cys Val Cys Met Val Phe Met Ser Trp Leu Leu Thr Met Leu Asn Ser
 100 105 110
 Thr Leu His Thr Val Leu Ile Val Lys Leu Ser Phe Cys Glu Asp Asn
 115 120 125
 Val Ile Pro His Phe Phe Cys Asp Ile Ser Ala Val Leu Lys Leu Ala
 130 135 140
 Cys Ser Asp Ile Tyr Ile Asn Glu Leu Thr Ile Phe Ile Thr Gly Ala
 145 150 155 160
 Phe Ile Ile Val Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln
 165 170 175
 Ile Val Cys Ser Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys
 180 185 190
 Ile Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
 195 200 205
 Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Thr Asn Asn Ser Thr
 210 215 220
 Val Lys Asp Thr Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
 225 230 235 240
 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala
 245 250 255
 Leu Ile Arg Val Leu Cys Lys Lys Glu Ile Ser Leu Xaa Trp Gln Tyr
 260 265 270
 Leu His Leu
 275

<210> 2393

<211> 327

<212> PRT

<213> Mus musculus (M165 8576192-7-12279-14147 678-1658)

<220>

<221> VARIANT

<222> (1)...(327)

<223> Xaa = Any Amino Acid

<400>2393

Trp Arg Ile Arg Met Ile Ile Asn Asn Gln Thr Ala Ile Pro Gln Phe
 1 5 10 15
 Ile Leu Leu Gly Leu Pro Ile Leu Pro Glu Gln Gln Gln Met Phe Tyr
 20 25 30
 Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile
 35 40 45
 Ile Ile Ile Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr
 50 55 60
 Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
 65 70 75 80
 Thr Met Pro Lys Leu Leu Gln Asn Ile Gln Ser Gln Asp Pro Ser Ile
 85 90 95
 Ser Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Phe Met Val Phe Ala
 100 105 110
 Asn Thr Glu Asn Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val
 115 120 125
 Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu
 130 135 140

Cys Val Ser Leu Val Val Leu Thr Trp Val Phe Thr Val Leu Tyr Ser
 145 150 155 160
 Met Leu His Thr Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn
 165 170 175
 Val Ile Thr His Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala
 180 185 190
 Cys Ser Asp Thr Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Thr
 195 200 205
 Leu Asp Thr Val Val Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln
 210 215 220
 Ile Val Cys Ser Ile Leu Lys Phe Ser Thr Lys Gln Gly Ile Ala Lys
 225 230 235 240
 Val Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
 245 250 255
 Gly Thr Ile Ile Gly Val Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr
 260 265 270
 Val Lys Glu Ile Val Met Ala Leu Met Tyr Thr Val Val Thr Pro Met
 275 280 285
 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala
 290 295 300
 Leu Ile Arg Val Leu Cys Lys Lys Gln Ile Pro Leu Xaa Cys Leu Tyr
 305 310 315 320
 Trp Asn Phe Xaa Ile Xaa Ile
 325

<210> 2394

<211> 316

<212> PRT

<213> Mus musculus (M166 8576192-8-1-1469 247-1198)

<400>2394

Arg Gly Arg Met Val Met Asn Asn Gln Thr Val Ile Ser Gln Leu Leu
 1 5 10 15
 Leu Val Gly Leu His Ile Pro Pro Asp His Gln Gln Gly Phe Tyr Thr
 20 25 30
 Leu Phe Leu Ala Met Tyr Leu Thr Ile Leu Gly Asn Leu Ile Ile
 35 40 45
 Ile Pro Leu Ile Ile Met Asp Ser Pro Phe Pro Thr His Pro Met Tyr
 50 55 60
 Leu Phe Leu Ile Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
 65 70 75 80
 Thr Val Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile
 85 90 95
 Ser Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Leu Met Val Phe Gly
 100 105 110
 Asp Met Glu Ser Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val
 115 120 125
 Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Thr Met Ser Pro Lys Phe
 130 135 140
 Cys Val Cys Val Gly Ala Leu Ser Trp Val Phe Thr Ile Met Tyr Ser
 145 150 155 160
 Met Val His Thr Leu Leu Leu Ser Arg Leu Ser Phe Cys Glu Asp Asn
 165 170 175
 Val Ile Pro His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala
 180 185 190
 Cys Ser Asp Ile Phe Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly
 195 200 205
 Pro Val Val Ala Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Arg
 210 215 220
 Ile Val Ser Ser Ile Leu Lys Val Ser Ser Ser Gln Gly Ile His Lys
 225 230 235 240

<220>

<221> VARIANT

<222> (1)...(338)

<223> Xaa = Any Amino Acid

<400>2396

Cys Xaa Xaa His Phe Ile Leu Ser Leu Leu Gln Met Lys Val Met Lys
 1 5 10 15
 Gln Met Val Thr Glu Ser Asn Ser Ser Val Thr Glu Phe Ile Leu Met
 20 25 30
 Gly Leu Thr Val Gln Lys Glu Leu Gln Leu Pro Leu Phe Ile Leu Phe
 35 40 45
 Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn Leu Ser Leu Met Asn
 50 55 60
 Leu Ile Cys Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Ile
 65 70 75 80
 Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser Phe Val Ser Asn Pro
 85 90 95
 Thr Met Leu Arg Ser Phe Val Thr Glu Gln Asn Thr Ile Ser Tyr Glu
 100 105 110
 Gly Cys Met Ser Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu
 115 120 125
 Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
 130 135 140
 His Pro Leu Lys Tyr Thr Thr Val Met Ser Pro Lys Ile Cys Cys Leu
 145 150 155 160
 Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala Gly Ala Leu Thr His
 165 170 175
 Thr Gly Phe Met Ile Arg Leu Ser Phe Cys Asn Ser Asn Ile Ile Asn
 180 185 190
 His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Leu Ser Cys Thr Ser
 195 200 205
 Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val Val Gly Thr Ile Ile
 210 215 220
 Ile Leu Ser Ser Ile Ile Ile Leu Val Ser Tyr Ala Met Ile Leu Ser
 225 230 235 240
 Asn Ile Leu His Met Ser Ser Ser Lys Gly Trp Ser Lys Ala Leu Gly
 245 250 255
 Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly
 260 265 270
 Leu Leu Ala Tyr Ile Lys Pro Thr Ser Ala Glu Thr Val Asp Gln Gly
 275 280 285
 Lys Phe Leu Ser Ile Phe Tyr Thr Leu Val Val Pro Met Leu Asn Pro
 290 295 300
 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Lys Arg
 305 310 315 320
 Thr Met Lys Arg Val Thr Thr Xaa Met Asn Ser Cys Ala Phe Ile Val
 325 330 335
 Leu Pro

<210> 2397

<211> 340

<212> PRT

<213> Mus musculus (M169 8576195-13-2329-4897 1250-2268)

<220>

<221> VARIANT

<222> (1)...(340)

<223> Xaa = Any Amino Acid

<400>2397

Ile Ser Cys Leu Val Val Ser Pro Ser Ile Leu Gln Thr Ser His Thr
 1 5 10 15
 Lys Gln Ile Thr Met Glu Asn Asp Ser Phe Val Ser Glu Phe Ile Leu
 20 25 30
 Met Gly Leu Thr Asp His Pro Glu Leu Gln Leu Ser Leu Phe Val Leu
 35 40 45
 Phe Leu Met Asn Tyr Thr Ala Ile Val Met Gly Asn Leu Ser Leu Met
 50 55 60
 Ile Leu Ile Phe Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe Phe
 65 70 75 80
 Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe Thr
 85 90 95
 Pro Lys Met Leu Met Ser Phe Phe Leu Glu Lys Asn Thr Ile Ser Phe
 100 105 110
 Arg Gly Cys Met Thr Gln Leu Phe Phe Cys Phe Phe Val Asn Ser
 115 120 125
 Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
 130 135 140
 Cys Lys Pro Leu Leu Tyr Lys Thr Ile Met Val Pro Arg Ile Cys Cys
 145 150 155 160
 Leu Leu Met Phe Val Ser Tyr Leu Ile Gly Phe Thr Ser Ala Met Ile
 165 170 175
 Leu Thr Gly Leu Met Phe Arg Leu Asn Phe Cys Asn Asn His Ile Ile
 180 185 190
 Asn His Tyr Met Cys Asp Ile Phe Pro Val Ile Gln Ile Ser Cys Ser
 195 200 205
 Asp Thr Tyr Leu Asn Glu Leu Val Ser Thr Ala Val Val Gly Thr Gly
 210 215 220
 Ile Ile Leu Cys Ser Leu Leu Ile Leu Met Ser Tyr Ala Leu Ile Leu
 225 230 235 240
 Phe Asn Ile Leu Asn Met Ser Ser Gly Lys Gly Trp Ser Lys Ala Met
 245 250 255
 Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser
 260 265 270
 Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu Thr Val Gly Gln
 275 280 285
 Gly Lys Phe Phe Ser Leu Phe Tyr Thr Phe Leu Val Pro Met Leu Asn
 290 295 300
 Pro Leu Ile Tyr Ser Leu Gln Asn Lys Asp Val Lys Val Ala Val Lys
 305 310 315 320
 Lys Thr Leu Lys Arg Ile Ser Asn Xaa Leu Glu Pro Leu Ala Leu His
 325 330 335
 Arg Thr Leu Ser
 340

<210> 2398

<211> 336

<212> PRT

<213> Mus musculus (M171 8576195-15-1361-3546 1172-2177)

<220>

<221> VARIANT

<222> (1)...(336)

<223> Xaa = Any Amino Acid

<400>2398

Phe Xaa Leu Met Leu Leu Gln Met Gln His Met Lys Gln Met Ile Met
 1 5 10 15
 Glu Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Tyr
 20 25 30
 Gln Pro Glu Leu Trp Trp Pro Leu Phe Val Leu Phe Leu Val Asn Tyr

```

      35      40      45
Thr Ala Thr Val Met Gly Asn Leu Ser Leu Met Thr Leu Ile Cys Leu
  50      55      60
Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Ile Leu Asn Leu Ser
  65      70      75      80
Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe Thr Pro Lys Met Leu Met
      85      90      95
Gly Phe Val Ser Glu His Asn Thr Ile Ser Phe Thr Gly Cys Met Thr
      100      105      110
Gln Leu Phe Phe Cys Leu Phe Val Asn Ser Glu Cys Tyr Val Leu
      115      120      125
Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Leu
      130      135      140
Tyr Thr Val Val Met Ser Pro Arg Ala Cys Ser Leu Leu Met Leu Ala
      145      150      155      160
Ala His Leu Met Gly Val Ser Ser Ala Val Val His Thr Gly Cys Ile
      165      170      175
Ile Gln Leu Arg Phe Cys Gly Ser Lys Val Ile Asn His Tyr Met Cys
      180      185      190
Asp Thr Phe Pro Leu Leu Glu Leu Ser Cys Gly Ser Ser His Val Asn
      195      200      205
Glu Leu Val Ser Ser Val Ser Val Ala Val Val Val Ile Ser Ser
      210      215      220
Leu Ile Ile Val Ser Ser Tyr Ala Leu Ile Leu Val Asn Val Ile His
      225      230      235      240
Leu Ser Ser Ser Lys Gly Trp Ser Lys Ala Val Ser Thr Cys Ser Ser
      245      250      255
His Ile Ile Thr Val Ala Leu Phe Tyr Gly Phe Gly Leu Leu Ala His
      260      265      270
Ile Lys Pro Ser Ser Ala Glu Ser Val Val Gln Arg Lys Phe Phe Ser
      275      280      285
Val Val Tyr Thr Phe Val Leu Pro Leu Leu Asn Pro Leu Ile Tyr Ser
      290      295      300
Ser Gly Asn Lys Asp Phe Lys Leu Leu Gly Thr Ile Asp Arg Leu Ala
      305      310      315      320
Gly Ser Asn Leu Ala Ser Phe Phe Phe Leu Ser Pro Leu Leu Ser Lys
      325      330      335

```

<210> 2399

<211> 326

<212> PRT

<213> Mus musculus (M172 8576195-20-3387-5132 199-1176)

<220>

<221> VARIANT

<222> (1)...(326)

<223> Xaa = Any Amino Acid

<400>2399

```

Ile Leu Thr Asp Met Thr Xaa Glu Gly Met Ala Ser Gly Asn Asp Ser
  1      5      10      15
Thr Thr Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu
      20      25      30
Leu Gln Leu Pro Phe Phe Phe Leu Phe Leu Gly Ile Tyr Val Val Ser
      35      40      45
Ile Val Gly Asn Leu Gly Leu Ile Val Leu Ile Val Leu Asn Pro His
      50      55      60
Leu His Thr Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp
      65      70      75      80
Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys Met Leu Val Gly Phe Val
      85      90      95

```

Lys Gln Asn Ile Ile Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe
 100 105 110
 Phe Ala Phe Phe Val Ile Asp Glu Cys Cys Ile Leu Thr Ala Met Ser
 115 120 125
 Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Lys Val Thr
 130 135 140
 Met Ser Tyr Gln Val Cys Phe Met Met Thr Val Ser Val Tyr Met Met
 145 150 155 160
 Gly Phe Val Gly Ala Ile Ala His Thr Ile Cys Met Leu Arg Leu Thr
 165 170 175
 Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Met Cys Asp Ile Pro Pro
 180 185 190
 Leu Leu Lys Leu Ser Cys Thr Asn Thr Ser Val Asn Glu Leu Val Val
 195 200 205
 Phe Ile Val Val Gly Val Asn Val Ile Gly Pro Thr Leu Ile Ile Phe
 210 215 220
 Thr Ser Tyr Thr Leu Ile Ile Phe Asn Ile Ser His Ile Arg Ser Thr
 225 230 235 240
 Glu Gly Arg Ser Lys Ala Ile Ser Thr Cys Ser Ser His Ile Ile Ala
 245 250 255
 Val Ser Ile Phe Phe Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser
 260 265 270
 Pro Val Gly Ser Val Gly Glu Asp Lys Val Ser Thr Val Phe Tyr Thr
 275 280 285
 Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys
 290 295 300
 Asp Val His Ile Ala Leu His Lys Thr Leu Lys Lys Ser Met Leu Ile
 305 310 315 320
 Xaa Ile Glu Thr Phe Phe
 325

<210> 2400

<211> 337

<212> PRT

<213> Mus musculus (M174 8576195-24-446-3721 1969-959)

<220>

<221> VARIANT

<222> (1)...(337)

<223> Xaa = Any Amino Acid

<400>2400

Leu Leu Phe Leu Gln Arg Pro Ser Met Lys Gln Met Ala Thr Lys Asn
 1 5 10 15
 Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Asp Gln Pro
 20 25 30
 Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu Asn His Thr Val
 35 40 45
 Ile Val Val Gly Asn Leu Ser Leu Met Ser Leu Ile Ile Leu Asn Ser
 50 55 60
 Asn Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Ile
 65 70 75 80
 Asp Phe Cys Tyr Ser Phe Val Phe Thr Pro Lys Met Leu Met Ser Phe
 85 90 95
 Val Ser Glu Lys Asn Ile Ile Pro Phe Thr Gly Cys Met Thr Gln Leu
 100 105 110
 Phe Phe Phe Cys Phe Phe Ala His Ser Glu Ser Trp Val Leu Thr Val
 115 120 125
 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Lys
 130 135 140
 Ala Ile Met Leu Pro Arg Ile Cys Cys Leu Leu Met Phe Val Ser Tyr

| | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu Phe Ser Ser Arg Phe Ser Met Ile Ser Met Leu Ala Gly Asn Gly | | | | | | | | | | | | | | | | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Ser | Ser | Val | | Thr | Glu | Phe | Val | Leu | Ala | Gly | Leu | Thr | Asp | Arg | Pro | Glu |
| | | | | 20 | | | | | 25 | | | | | 30 | | |
| Leu | Gln | Leu | Pro | Leu | Phe | Tyr | Leu | Phe | Leu | Ile | Ile | Tyr | Ile | Ile | Thr | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Val | Val | Gly | Asn | Leu | Gly | Leu | Ile | Ile | Leu | Ile | Gly | Leu | Asn | Pro | His | |
| | | 50 | | | | 55 | | | | | 60 | | | | | |
| Leu | His | Thr | Pro | Met | Tyr | Phe | Leu | Phe | Asn | Leu | Ser | Phe | Ile | Asp | | |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | | |
| Leu | Cys | Tyr | Ser | Ser | Val | Phe | Ser | Pro | Lys | Met | Leu | Ile | Asn | Phe | Val | |
| | | | | 85 | | | | | 90 | | | | | 95 | | |
| Ser | Glu | Lys | Asn | Ser | Ile | Ser | Tyr | Ala | Gly | Cys | Met | Thr | Gln | Leu | Phe | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Leu | Phe | Leu | Phe | Phe | Val | Ile | Ser | Glu | Cys | Tyr | Met | Leu | Thr | Ser | Met | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Asn | Pro | Leu | Leu | Tyr | Lys | Val | |
| | | 130 | | | | 135 | | | | | 140 | | | | | |
| Thr | Met | Ser | Pro | Gln | Ile | Cys | Ser | Val | Ile | Ser | Phe | Ala | Ala | Tyr | Gly | |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | | |
| Met | Gly | Phe | Ala | Gly | Ser | Ser | Ala | His | Thr | Gly | Cys | Met | Leu | Arg | Leu | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Thr | Phe | Cys | Asn | Val | Asn | Val | Ile | Asn | His | Tyr | Leu | Cys | Asp | Ile | Leu | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |

Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Val Val
 195 200 205
 Val Leu Ile Val Val Gly Ile Asn Ile Thr Val Pro Ser Phe Thr Ile
 210 215 220
 Leu Ile Ser Tyr Val Phe Ile Leu Ala Asn Ile Leu Asn Ile Lys Ser
 225 230 235 240
 Thr Gln Gly Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His Ile Met
 245 250 255
 Ala Ile Ser Leu Phe Phe Gly Ser Ala Ala Phe Met Tyr Leu Lys Tyr
 260 265 270
 Ser Ser Gly Ser Met Glu Gln Gly Lys Ile Ser Ser Val Phe Tyr Thr
 275 280 285
 Asn Val Gly Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
 290 295 300
 Asp Val Lys Val Ala Leu Arg Lys Ser Leu Ile Lys Ile Gln Arg Lys
 305 310 315 320
 Asp Arg Phe Xaa Leu
 325

<210> 2402

<211> 204

<212> PRT

<213> Unknown (p124-dir-0-7 conceptual translation of range 2-613)

<400>2402

Phe Leu Glu Phe Ala Phe Thr Pro Ala Cys Ile Leu Arg Phe Pro Val
 1 5 10 15
 Thr Ile Val Thr Gly Asp Arg Thr Ile Ser Phe Ser Asn Cys Phe Phe
 20 25 30
 Phe Gln Leu Phe Phe Ile Phe Leu Gly Val Met Glu Phe Phe Leu Leu
 35 40 45
 Ala Pro Thr Ser Tyr Asp Cys Tyr Val Ala Ile Cys Arg Pro Leu His
 50 55 60
 His Ser Thr Val Met Thr Arg Gly Val Cys Thr Leu Leu Val Leu Ser
 65 70 75 80
 Ser Phe Leu Ser Thr Tyr Leu Asn Leu Phe Pro Pro Val Val Met Asp
 85 90 95
 Phe Trp Leu Asp Cys Cys Asp Pro Asn Ile Leu Lys His Phe Ile Cys
 100 105 110
 Asp Ser Ser Ser Val Met Glu Leu Cys Thr Asp Thr Arg Phe Leu
 115 120 125
 Glu Leu Met Thr Phe Pro Leu Ser Leu Val Leu Met Thr Ala Ser Tyr
 130 135 140
 Thr Ala Ile Ile Cys Ala Ile Leu Arg Leu Pro Tyr Ala Gln Gln Arg
 145 150 155 160
 Arg Lys Val Phe Ser Ile Cys Ser Ser His Arg Val Gly Phe Ser Ile
 165 170 175
 Thr Tyr Gly Ser Cys Ile Phe Met Tyr Ile Asn Thr Val Ala Asp Lys
 180 185 190
 Asp Arg Val Gly Val Arg Gln Gly Leu Gly Gly Pro
 195 200

<210> 2403

<211> 312

<212> PRT

<213> Unknown (OR2B8)

<400>2403

Met Asp Gln Lys Asn Gly Ser Ser Phe Thr Gly Phe Ile Leu Leu Gly
 1 5 10 15
 Phe Ser Asp Arg Pro Gln Leu Glu Leu Val Leu Phe Val Val Phe Leu

```

      20      25      30
Ile Phe Tyr Ile Phe Thr Leu Leu Gly Asn Lys Thr Ile Ile Val Leu
      35      40      45
Ser His Leu Asp Pro His Leu His Asn Pro Met Tyr Phe Phe Phe Ser
      50      55      60
Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Gly Ile Val Pro Gln
      65      70      75      80
Leu Leu Val Asn Leu Arg Gly Ala Asp Lys Ser Ile Ser Tyr Gly Gly
      85      90      95
Cys Val Val Gln Leu Tyr Ile Ser Leu Gly Leu Gly Ser Thr Glu Cys
      100      105      110
Val Leu Leu Gly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
      115      120      125
Pro Leu His Tyr Thr Val Val Met His Pro Cys Leu Tyr Val Leu Met
      130      135      140
Ala Ser Thr Ser Trp Val Ile Gly Phe Ala Asn Ser Leu Leu Gln Thr
      145      150      155      160
Val Leu Ile Leu Leu Leu Thr Leu Cys Gly Arg Asn Lys Leu Glu His
      165      170      175
Phe Leu Cys Glu Val Pro Pro Leu Leu Lys Leu Ala Cys Val Asp Thr
      180      185      190
Thr Met Asn Glu Ser Glu Leu Phe Phe Val Ser Val Ile Ile Leu Leu
      195      200      205
Val Pro Val Ala Leu Ile Ile Phe Ser Tyr Ser Gln Ile Val Arg Ala
      210      215      220
Val Val Arg Ile Lys Ser Ala Thr Gly Gln Arg Lys Val Phe Gly Thr
      225      230      235      240
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Ala Ile
      245      250      255
Tyr Ala Tyr Leu Gln Pro Gly Asn Asn Tyr Ser Gln Asp Gln Gly Lys
      260      265      270
Phe Ile Ser Leu Phe Tyr Thr Ile Ile Thr Pro Met Ile Asn Pro Leu
      275      280      285
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Val
      290      295      300
Leu Trp Lys Asn Tyr Asp Ser Arg
      305      310

```

<210> 2404

<211> 315

<212> PRT

<213> Unknown (OR12D3)

<400>2404

```

Met Glu Asn Val Thr Thr Met Asn Glu Phe Leu Leu Leu Gly Leu Thr
      1      5      10      15
Gly Val Gln Glu Leu Gln Pro Phe Phe Phe Gly Ile Phe Leu Ile Ile
      20      25      30
Tyr Leu Ile Asn Leu Ile Gly Asn Gly Ser Ile Leu Val Met Val Val
      35      40      45
Leu Glu Pro Gln Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
      50      55      60
Ser Cys Leu Asp Ile Ser Tyr Ser Ser Val Thr Leu Pro Lys Leu Leu
      65      70      75      80
Val Asn Leu Val Cys Ser Arg Arg Ala Ile Ser Phe Leu Gly Cys Ile
      85      90      95
Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Ala Ile Leu
      100      105      110
Leu Ala Ile Met Ala Phe Asp Arg Phe Val Ala Ile Cys Asn Pro Leu
      115      120      125
Arg Tyr Thr Val Ile Met Asn Pro Gln Val Cys Ile Leu Leu Ala Ala

```


130 135 140
 Ala Ala Trp Leu Ile Ser Phe Phe Tyr Ala Leu Met His Ser Val Met
 145 150 155 160
 Thr Ala His Leu Ser Phe Cys Gly Ser Gln Lys Leu Asn His Phe Phe
 165 170 175
 Tyr Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Ser Asp Thr Leu Leu
 180 185 190
 Asn Gln Trp Leu Leu Ser Ile Val Thr Gly Ser Ile Ser Met Gly Ala
 195 200 205
 Phe Phe Leu Thr Leu Leu Ser Cys Phe Tyr Val Ile Gly Phe Leu Leu
 210 215 220
 Phe Lys Asn Arg Ser Cys Arg Ile Leu His Lys Ala Leu Ser Thr Cys
 225 230 235 240
 Ala Ser His Phe Met Val Val Cys Leu Phe Tyr Gly Pro Val Gly Phe
 245 250 255
 Thr Tyr Ile Arg Pro Ala Ser Ala Thr Ser Met Ile Gln Asp Arg Ile
 260 265 270
 Met Ala Ile Met Tyr Ser Ala Val Thr Pro Val Leu Asn Pro Leu Ile
 275 280 285
 Tyr Thr Leu Arg Asn Lys Glu Val Met Met Ala Leu Lys Lys Ile Phe
 290 295 300
 Gly Arg Lys Leu Phe Lys Asp Trp Gln Gln His
 305 310 315

<210> 2405

<211> 115

<212> PRT

<213> Unknown (3273654-dir-0-5 conceptual translation of range 1-345)

<400>2405

Leu Phe Cys Asp Pro Ser Gln Leu Leu Asn Leu Ser Cys Ser Asn Thr
 1 5 10 15
 Phe Ser Asp Asn Ile Val Lys Tyr Phe Leu Gly Ala Leu Tyr Gly Leu
 20 25 30
 Phe Pro Ile Ser Gly Ile Leu Phe Ser Tyr Tyr Lys Ile Ser Ser
 35 40 45
 Ile Leu Arg Ile Pro Ser Leu Gly Gly Lys Tyr Lys Ala Phe Ser Thr
 50 55 60
 Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Leu Val Thr Ala Ser
 65 70 75 80
 Thr Val Tyr Leu Gly Ser Val Ala Ser His Ser Pro Arg Asn Asp Val
 85 90 95
 Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 100 105 110
 Ile Cys Ser
 115

<210> 2406

<211> 139

<212> PRT

<213> Unknown (3810857-dir-0-6 conceptual translation of range 1-417)

<220>

<221> VARIANT

<222> (1)...(139)

<223> Xaa = Any Amino Acid

<400>2406

Met Ala Xaa Asp Arg Phe Val Ala Ile Cys His Pro Leu Asn Tyr Thr
 1 5 10 15
 Val Ile Met Asn Pro Arg Ile Cys Gly Leu Leu Val Leu Leu Ser Trp

```

      20      25      30
Ile Ile Met Phe Trp Val Ser Leu Ile His Met Leu Leu Met Lys Gln
      35      40      45
Leu Asn Phe Ser Thr Ser Thr Glu Ile Pro His Phe Phe Cys Glu Leu
      50      55      60
Thr Glu Leu Leu Arg Val Gly Arg Ser Asp Thr Phe Thr Gln Asn Ile
65      70      75      80
Phe Leu Tyr Leu Gly Tyr Cys Arg Ala Gly Met Phe Pro Val Ile Gly
      85      90      95
Ile Ala Phe Ser Tyr Phe His Ile Val Ser Ala Leu Met Lys Met Ser
      100      105      110
Ser Ile Lys Asn Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu
      115      120      125
Cys Val Val Ser Met Phe Tyr Gly Thr Gly Leu
      130      135

```

<210> 2407

<211> 211

<212> PRT

<213> Unknown (p106-dir-0-8 conceptual translation of range 2-633)

<220>

<221> VARIANT

<222> (1)...(211)

<223> Xaa = Any Amino Acid

<400>2407

```

Leu Val Asp Leu Cys Leu Val Thr Thr Leu Val Pro Lys Met Leu Val
1      5      10      15
Asn Leu Leu Thr His Ser Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
      20      25      30
Gln Met Phe Phe Phe Met Val Phe Ala Cys Ser Asn Thr Leu Leu Leu
      35      40      45
Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Tyr His Pro Leu Ser
50      55      60
Tyr Val Thr Ile Met Arg Pro Gln Phe Cys Gly Leu Leu Ala Leu Leu
65      70      75      80
Ser Trp Thr Ile Ser Leu Leu Asn Ala Val Leu His Ser Pro Leu Val
      85      90      95
Met Arg Leu Leu Phe Cys Thr Glu Arg Glu Ile Pro Leu Phe Tyr His
      100      105      110
Asp Leu Thr Xaa Val Leu Arg Leu Ser Cys Thr Asp Met Leu Ile Asn
      115      120      125
Asp Ile Leu Val Tyr Leu Leu Thr Ala Leu Leu Ser Ile Phe Pro Phe
130      135      140
Thr Gly Ile Leu Phe Ser Tyr Thr Gln Ile Cys Ser Ser Ile Val Lys
145      150      155      160
Ile Pro Ser Thr Gly Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser
      165      170      175
Tyr Leu Cys Val Val Leu Leu Phe Tyr Gly Thr Val Ile Gly Val Tyr
      180      185      190
Leu Ser Ser Ser Val Thr Lys Ser Ser Trp Lys Ser Ser Val Ala Ser
195      200      205
Val Ile Cys
210

```

<210> 2408

<211> 159

<212> PRT

<213> Unknown (4877338-dir-0-6 conceptual translation of range 2-478)

<220>

<221> VARIANT

<222> (1)...(159)

<223> Xaa = Any Amino Acid

<400>2408

```

Ile Cys His Pro Leu Arg Tyr Thr Val Ser Met Asn Pro Arg Leu Cys
 1           5           10           15
Val Gln Leu Ile Leu Leu Ser Leu Phe Ile Ser Ile Ala Asp Ala Leu
          20           25           30
Leu His Ser Leu Met Val Leu Gln Leu Ser Phe Cys Thr Asp Leu Glu
          35           40           45
Ile Ser Leu Phe Cys Glu Val Val Gln Val Ile Lys Arg Ala Cys Ser
          50           55           60
Asp Thr Leu Ile Asn Asn Ile Leu Val Tyr Phe Ala Ala Gly Ile Phe
          65           70           75           80
Ala Gly Val Pro Leu Ser Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val
          85           90           95
Ser Ser Ile Leu Xaa Met Pro Ser Ser Gly Arg Lys Xaa Lys Ala Phe
          100          105          110
Ser Thr Cys Glu Ser His Leu Ser Val Val Ser Phe Phe Tyr Gly Thr
          115          120          125
Ala Phe Gly Val Tyr Ile Ser Ser Ala Val Thr Asp Ser Ser Arg Lys
          130          135          140
Thr Ala Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Val Met
          145          150          155

```

<210> 2409

<211> 310

<212> PRT

<213> Unknown (p22-dir-0-11 conceptual translation of range 1-930)

<400>2409

```

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1           5           10           15
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
          20           25           30
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
          35           40           45
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
          50           55           60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
          65           70           75           80
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
          85           90           95
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
          100          105          110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
          115          120          125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
          130          135          140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
          145          150          155          160
Phe Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
          165          170          175
Leu Phe Cys Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr
          180          185          190
His Ile Ile His Thr Ala Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
          195          200          205
Thr Leu Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
          210          215          220

```

Ile Leu Gln Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Leu Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Pro Gly Arg Val Leu
 290 295 300
 Trp Arg Pro Phe Gln Arg
 305 310

<210> 2410

<211> 310

<212> PRT

<213> Unknown (p23-dir-0-11 conceptual translation of range 1-930)

<400>2410

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys Cys
 115 120 125
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
 145 150 155 160
 Phe Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
 165 170 175
 Leu Phe Cys Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr
 180 185 190
 His Ile Ile His Thr Ala Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
 210 215 220
 Ile Leu Gln Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Leu Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Arg Leu Arg Asn Lys Asp Met His Gly Ala Pro Gly Arg Val Leu
 290 295 300
 Trp Arg Pro Phe Gln Arg
 305 310

<210> 2411

<211> 215

<212> PRT

<213> Unknown (p139-dir-0-8 conceptual translation of range 2-646)

<400>2411

```

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
 1           5           10           15
Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
          20           25           30
Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
          35           40           45
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
          50           55           60
Cys Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Ser Leu
          65           70           75           80
Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr Phe Leu Leu
          85           90           95
Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Leu Phe Cys
          100          105          110
Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr His Ile Ile
          115          120          125
His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
          130          135          140
Gly Phe Met Thr Lys Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
          145          150          155          160
Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser
          165          170          175
His Leu Gly Val Val Ser Leu Phe Tyr Gly Met Leu Ala Met Val Tyr
          180          185          190
Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
          195          200          205
Met Tyr Ala Val Val Thr Pro
          210          215

```

<210> 2412

<211> 312

<212> PRT

<213> Unknown (p182-dir-0-11 conceptual translation of range 1-936)

<220>

<221> VARIANT

<222> (1)...(312)

<223> Xaa = Any Amino Acid

<400>2412

```

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1           5           10           15
Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
          20           25           30
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
          35           40           45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
          50           55           60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
          65           70           75           80
Met Leu Val Asn Pro Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
          85           90           95
Cys Leu Thr Gln Leu Xaa Phe Leu Val Ser Leu Val Thr Leu Asp Asn
          100          105          110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
          115          120          125

```

Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
 145 150 155 160
 Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
 165 170 175
 Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
 180 185 190
 His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Cys Ile Val Arg Thr
 210 215 220
 Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
 290 295 300
 Arg Arg Leu Phe Gln Arg Pro Lys
 305 310

<210> 2413

<211> 312

<212> PRT

<213> Unknown (p184-dir-0-11 conceptual translation of range 1-936)

<220>

<221> VARIANT

<222> (1)...(312)

<223> Xaa = Any Amino Acid

<400>2413

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Pro Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Xaa Phe Leu Val Ser Leu Val Thr Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
 115 120 125
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
 145 150 155 160
 Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His His
 165 170 175
 Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
 180 185 190
 His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu

195 200 205
 Thr Pro Leu Gly Phe Met Thr Thr Ser His Val Cys Ile Val Arg Thr
 210 215 220
 Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
 290 295 300
 Arg Arg Leu Phe Gln Arg Pro Lys
 305 310

<210> 2414

<211> 312

<212> PRT

<213> Unknown (p183-dir-0-11 conceptual translation of range 1-936)

<400>2414

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
 115 120 125
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
 145 150 155 160
 Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
 165 170 175
 Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
 180 185 190
 His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Cys Ile Val Arg Thr
 210 215 220
 Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
 290 295 300
 Arg Arg Leu Phe Gln Arg Pro Lys

305

310

<210> 2415

<211> 312

<212> PRT

<213> Unknown (p186-dir-0-11 conceptual translation of range 1-936)

<400>2415

```

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1           5           10           15
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
          20           25           30
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
          35           40           45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
          50           55           60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
65          70          75          80
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
          85          90          95
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
          100         105         110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
          115         120         125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
          130         135         140
Leu Ser Leu Cys Trp Gly Leu Ser Val Phe Tyr Gly Leu Leu Leu Thr
145          150         155         160
Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
          165         170         175
Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
          180         185         190
His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
          195         200         205
Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
210          215         220
Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
225          230         235         240
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
          245         250         255
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
          260         265         270
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
          275         280         285
His Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
290          295         300
Arg Arg Leu Phe Gln Arg Pro Lys
305          310

```

<210> 2416

<211> 215

<212> PRT

<213> Unknown (p140-dir-0-8 conceptual translation of range 2-646)

<400>2416

```

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
 1           5           10           15
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
          20           25           30
Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
          35           40           45

```


Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
 50 55 60
 Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Ser Leu
 65 70 75 80
 Cys Trp Gly Leu Ser Val Phe Tyr Gly Leu Leu Thr Leu Leu Leu
 85 90 95
 Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Phe Phe Cys
 100 105 110
 Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile
 115 120 125
 His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
 130 135 140
 Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
 145 150 155 160
 Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
 165 170 175
 His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala Met Val Cys
 180 185 190
 Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
 195 200 205
 Met Tyr Ala Val Val Thr Pro
 210 215

<210> 2417

<211> 215

<212> PRT

<213> Unknown (p141-dir-0-8 conceptual translation of range 2-646)

<400>2417

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Asn Met Leu Val
 1 5 10 15
 Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
 20 25 30
 Lys Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
 50 55 60
 Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Ser Leu
 65 70 75 80
 Gly Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr Leu Leu Met
 85 90 95
 Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Leu Phe Cys
 100 105 110
 Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile
 115 120 125
 His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
 130 135 140
 Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
 145 150 155 160
 Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser
 165 170 175
 His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala Met Val Tyr
 180 185 190
 Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
 195 200 205
 Met Tyr Ala Val Val Thr Pro
 210 215

<210> 2418

<211> 312

<212> PRT

<213> Unknown (p187-dir-0-11 conceptual translation of range 1-936)

<400>2418

```

Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Leu Gly
 1          5          10          15
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
          20          25          30
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
          35          40          45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
          50          55          60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
          65          70          75          80
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Glu
          85          90          95
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
          100          105          110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
          115          120          125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
          130          135          140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
          145          150          155          160
Leu Leu Met Asn Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
          165          170          175
Leu Phe Cys Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr
          180          185          190
His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
          195          200          205
Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val His Ile Val Arg Thr
          210          215          220
Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
          225          230          235          240
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
          245          250          255
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
          260          265          270
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
          275          280          285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Val Leu Gly Arg Val Leu
          290          295          300
Gly Arg Pro Phe Gln Arg Pro Lys
305          310

```

<210> 2419

<211> 211

<212> PRT

<213> Unknown (p167-dir-0-8 conceptual translation of range 2-634)

<400>2419

```

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
 1          5          10          15
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
          20          25          30
Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu
          35          40          45
Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr
          50          55          60
Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Cys Leu Cys
          65          70          75          80
Trp Ser Val Leu Tyr Gly Leu Leu Leu Thr Leu Leu Met Thr Thr Val

```

```

      85              90              95
Thr Phe Cys Gly Ser Arg Lys Ile His Tyr Leu Phe Cys Glu Met Tyr
      100              105              110
Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile His Thr Val
      115              120              125
Leu Val Ala Thr Gly Cys Phe Phe Leu Thr Pro Leu Gly Phe Thr Thr
      130              135              140
Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln Ile Pro Ser Val
      145              150              155              160
Pro Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser His Leu Gly Val
      165              170              175
Val Ser Leu Phe Tyr Gly Thr Leu Val Met Val Tyr Leu Gln Pro Leu
      180              185              190
His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val
      195              200              205
Val Thr Pro
      210

```

<210> 2420

<211> 210

<212> PRT

<213> Unknown (p168-dir-0-8 conceptual translation of range 2-632)

<400>2420

```

Phe Thr Asp Leu Phe Phe Val Thr Asn Ile Pro Lys Met Leu Val Asn
1          5          10          15
Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr Gln
      20          25          30
Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu Ala
      35          40          45
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Val
      50          55          60
Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Cys Leu Cys Trp
      65          70          75          80
Ser Val Leu Tyr Gly Leu Leu Leu Thr Leu Leu Met Thr Thr Val Thr
      85          90          95
Phe Cys Gly Ser Arg Lys Ile His Tyr Leu Phe Cys Glu Met Tyr Val
      100          105          110
Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile His Thr Val Leu
      115          120          125
Val Ala Thr Gly Cys Phe Phe Leu Thr Pro Leu Gly Phe Thr Thr Thr
      130          135          140
Ser Tyr Ile Arg Ile Val Arg Thr Ile Leu Gln Ile Pro Ser Val Pro
      145          150          155          160
Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser His Leu Gly Val Val
      165          170          175
Ser Leu Phe Tyr Gly Thr Leu Val Met Val Tyr Leu Gln Pro Leu His
      180          185          190
Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val Val
      195          200          205
Thr Pro
      210

```

<210> 2421

<211> 313

<212> PRT

<213> Unknown (p145-dir-0-11 conceptual translation of range 1-937)

<400>2421

```

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
1          5          10          15

```

Ile Ser Glu Ser Pro Glu Gln Gln Gln Met Leu Phe Trp Met Phe Leu
 20 25 30
 Val Arg Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Thr Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
 100 105 110
 Leu Asn Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
 115 120 125
 Pro Leu His Tyr Val Thr Ala Met Ile Pro Gly Leu Cys Ile Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
 145 150 155 160
 Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
 165 170 175
 Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
 180 185 190
 His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
 210 215 220
 Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
 245 250 255
 Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Ile Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Arg
 290 295 300
 Gln Gly Lys Ala Phe Gln Lys Leu Thr
 305 310

<210> 2422

<211> 214

<212> PRT

<213> Unknown (3831606-dir-0-8' conceptual translation of range 2-642)

<400>2422

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
 1 5 10 15
 Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Thr Gly Cys Leu Thr
 20 25 30
 Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Asn Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
 50 55 60
 Tyr Val Thr Ala Met Ile Pro Gly Leu Cys Ile Leu Leu Leu Ser Leu
 65 70 75 80
 Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile Leu Leu Met
 85 90 95
 Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr Leu Phe Cys
 100 105 110
 Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile His Val Asn
 115 120 125

His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Ile Pro Leu
 130 135 140
 Gly Phe Met Ile Thr Ser Asn Ala Arg Ile Val Arg Ala Ile Leu Gln
 145 150 155 160
 Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
 165 170 175
 His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly Met Val Tyr
 180 185 190
 Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
 195 200 205
 Met His Ala Val Val Thr
 210

<210> 2423

<211> 319

<212> PRT

<213> Unknown (p35-dir-0-11 conceptual translation of range 1-954)

<400>2423

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Val Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Ser Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Met Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
 115 120 125
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Gly Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
 145 150 155 160
 Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
 165 170 175
 Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
 180 185 190
 His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala His Ile Val Arg Ala
 210 215 220
 Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Ser Ala Ser His Leu Ala Val Val Phe Leu Phe Tyr Gly Thr Leu Gly
 245 250 255
 Met Val Tyr Leu Gln Pro Leu His Asn Leu Gln Pro Leu Gln Thr Tyr
 260 265 270
 Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val Val Thr Pro
 275 280 285
 Met Ile Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met His Gly
 290 295 300
 Ala Leu Gly Arg Leu Arg Gln Gly Lys Ala Phe Gln Lys Leu Thr
 305 310 315

<210> 2424

<211> 313

<212> PRT

<213> Unknown (p34-dir-0-11 conceptual translation of range 1-937)

<400>2424

```

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
 1          5          10          15
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
          20          25          30
Val Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
          35          40          45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
          50          55          60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
65          70          75          80
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
          85          90          95
Cys Leu Met Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
          100          105          110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
          115          120          125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
130          135          140
Leu Ser Leu Cys Trp Gly Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
145          150          155          160
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
          165          170          175
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
          180          185          190
His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
          195          200          205
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala His Ile Val Arg Ala
210          215          220
Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
225          230          235          240
Cys Ala Ser His Leu Ala Val Val Phe Leu Phe Tyr Gly Thr Val Gly
          245          250          255
Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val
          260          265          270
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Ile Asn Pro Phe Ile
          275          280          285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Arg
290          295          300
Gln Gly Lys Ala Phe Gln Lys Leu Thr
305          310

```

<210> 2425

<211> 313

<212> PRT

<213> Unknown (p87-dir-0-11 conceptual translation of range 1-937)

<400>2425

```

Met Asp Gly Asp Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Arg Gly
 1          5          10          15
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
          20          25          30
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Phe Ile Ile Leu Ala
          35          40          45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Val Tyr Phe Phe Leu Ala
          50          55          60
Asn Phe Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys

```

```

65          70          75          80
Met Pro Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
      85          90          95
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
      100          105          110
Leu Ile Pro Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
      115          120          125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
      130          135          140
Leu Ser Met Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
145          150          155          160
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
      165          170          175
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
      180          185          190
His Val Asn His Thr Val Leu Val Ala Met Gly Cys Phe Ile Phe Leu
      195          200          205
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
      210          215          220
Ile Leu Gln Ile Pro Pro Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
225          230          235          240
Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
      245          250          255
Ile Val Tyr Leu Gln Pro Pro Gln Thr Tyr Ser Met Lys Asp Ser Val
      260          265          270
Ala Thr Val Met Tyr Val Val Val Thr Pro Met Ile Asn Pro Phe Ile
      275          280          285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Asp Leu Gly Arg Leu Arg
      290          295          300
Gln Gly Lys Ala Phe Gln Lys Leu Thr
305          310

```

<210> 2426

<211> 313

<212> PRT

<213> Unknown (p136-dir-0-11 conceptual translation of range 1-939)

<400>2426

```

Met Asp Gly Gly Asn Gln Ser Lys Gly Ser Glu Phe Leu Leu Leu Gly
1      5      10      15
Met Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
      20      25      30
Ser Met Tyr Leu Val Thr Val Val Gly Asn Ala Leu Ile Ile Leu Ala
      35      40      45
Ile Thr Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Val
      50      55      60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
65          70          75          80
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ala Tyr Ala Gly
      85          90          95
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
      100          105          110
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
      115          120          125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
      130          135          140
Leu Ser Leu Cys Trp Val Phe Ser Val Leu Tyr Gly Leu Ile His Thr
145          150          155          160
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
      165          170          175
Leu Phe Cys Glu Met Tyr Val Leu Leu Gln Leu Ala Cys Ser Asn Ile

```

```
<210> 2427
<211> 313
<212> PRT
<213> Unknown (p163-dir-0-11 conceptual translation of range 1-939)
```

| | | | | | | | | | | | | | | | | |
|-----------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| <400>2427 | | | | | | | | | | | | | | | | |
| Met 1 | Asp | Gly | Gly | Asn 5 | Gln | Ser | Glu | Gly | Ser 10 | Glu | Phe | Leu | Leu 15 | Leu | Gly | |
| Met | Ser | Glu | Ser 20 | Pro | Glu | Gln | Gln | Arg 25 | Ile | Leu | Phe | Trp | Met 30 | Phe | Leu | |
| Ser | Met | Tyr 35 | Leu | Val | Thr | Val | Leu 40 | Gly | Asn | Val | Leu | Ile 45 | Ile | Leu | Ala | |
| Ile 50 | Ser | Ser | Asp | Ser | Arg | Leu 55 | His | Thr | Pro | Met | Tyr 60 | Phe | Phe | Leu | Ala | |
| Asn 65 | Leu | Ser | Phe | Thr | Asp 70 | Leu | Phe | Phe | Val | Thr 75 | Asn | Thr | Ile | Pro | Lys 80 | |
| Met | Leu | Val | Asn 85 | Leu | Gln | Ser | Gln | Asp | Lys 90 | Ala | Ile | Ser | Tyr | Ala 95 | Gly | |
| Cys | Leu | Thr | Gln 100 | Leu | Tyr | Phe | Leu | Leu 105 | Ser | Leu | Val | Thr | Leu 110 | Asp | Asn | |
| Leu | Ile | Leu 115 | Ala | Val | Met | Ala | Tyr 120 | Asp | Arg | Tyr | Val | Ala 125 | Ile | Cys | Cys | |
| Pro | Leu 130 | His | Tyr | Val | Thr | Ala 135 | Met | Ser | Pro | Arg | Leu 140 | Cys | Ile | Leu | Leu | |
| Leu 145 | Ser | Leu | Cys | Trp | Val | Phe 150 | Ser | Val | Leu | Tyr 155 | Gly | Leu | Ile | His | Thr 160 | |
| Leu | Leu | Met | Thr | Arg 165 | Val | Thr | Phe | Cys | Gly 170 | Ser | Arg | Lys | Ile | His 175 | Tyr | |
| Leu | Phe | Cys | Glu 180 | Met | Tyr | Phe | Leu | Leu 185 | Arg | Leu | Ala | Cys | Ser | Asn 190 | Ile | |
| Gln | Ile | Asn 195 | His | Thr | Val | Leu | Ile 200 | Ala | Thr | Gly | Cys | Phe 205 | Ile | Phe | Leu | |
| Ile | Pro | Leu 210 | Gly | Phe | Met | Ile 215 | Thr | Ser | Tyr | Ala | Arg | Ile 220 | Val | Arg | Ala | |
| Ile 225 | Leu | Arg | Ile | Pro | Ser | Ala 230 | Thr | Gly | Lys | Tyr 235 | Lys | Ala | Phe | Ser | Thr 240 | |
| Cys | Ala | Ser | His | Leu 245 | Ala | Val | Val | Ser | Leu 250 | Phe | Tyr | Gly | Thr | Leu 255 | Gly | |
| Met | Val | Tyr | Leu 260 | Gln | Pro | Leu | Gln | Thr 265 | Tyr | Ser | Thr | Lys | Asp 270 | Ser | Val | |
| Ala | Thr | Val | Met 275 | Tyr | Ala | Val | Val | Thr 280 | Pro | Met | Met | Asn 285 | Pro | Phe | Ile | |
| Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Ile | His | Gly | Ala | Leu | Gly | Arg | Leu | Leu | |

290 295 300
 Gln Gly Lys Ala Phe Gln Lys Leu Thr
 305 310

<210> 2428

<211> 312

<212> PRT

<213> Unknown (p18-dir-0-11 conceptual translation of range 1-936)

<400>2428

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Val Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Leu Gln Ser His Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
 115 120 125
 Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
 145 150 155 160
 Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
 165 170 175
 Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
 180 185 190
 Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
 210 215 220
 Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
 245 250 255
 Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
 290 295 300
 Asp Lys His Phe Lys Arg Leu Thr
 305 310

<210> 2429

<211> 312

<212> PRT

<213> Unknown (p32-dir-0-11 conceptual translation of range 1-936)

<400>2429

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
 20 25 30

Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Asn Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
 115 120 125
 Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
 130 135 140
 Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
 145 150 155 160
 Ile Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
 165 170 175
 Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
 180 185 190
 Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
 210 215 220
 Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
 245 250 255
 Met Val Tyr Leu Lys Pro Leu His Thr Phe Ser Val Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
 290 295 300
 Asp Thr His Phe Lys Arg Leu Thr
 305 310

<210> 2430

<211> 312

<212> PRT

<213> Unknown (p130-dir-0-11 conceptual translation of range 1-936)

<400>2430

Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Met Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ser Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
 100 105 110
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
 115 120 125
 Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
 130 135 140

Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
 145 150 155 160
 Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
 165 170 175
 Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
 180 185 190
 Gln Thr Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
 195 200 205
 Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
 210 215 220
 Ile Leu Arg Ile Pro Ser Leu Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
 245 250 255
 Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
 290 295 300
 Asp Lys His Phe Lys Arg Leu Thr
 305 310

<210> 2431

<211> 215

<212> PRT

<213> Unknown (p143-dir-0-8 conceptual translation of range 2-646)

<400>2431

Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
 1 5 10 15
 Ser Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Pro Gly Cys Leu Thr
 20 25 30
 Gln Leu Phe Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
 50 55 60
 Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu Leu Ile Leu
 65 70 75 80
 Cys Trp Ala Leu Ser Ile Leu Tyr Gly Leu Ile His Thr Leu Leu Met
 85 90 95
 Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr Ile Phe Cys
 100 105 110
 Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Asn
 115 120 125
 His Met Met Leu Ile Ala Thr Gly Cys Phe Val Phe Leu Val Pro Phe
 130 135 140
 Gly Phe Met Ile Met Ser Tyr Ile Cys Ile Val Arg Ala Ile Leu Lys
 145 150 155 160
 Ile Pro Ser Ala Ser Asn Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
 165 170 175
 His Leu Ala Val Val Ala Leu Phe Tyr Gly Thr Leu Cys Met Val Tyr
 180 185 190
 Leu Lys Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
 195 200 205
 Met Tyr Ala Val Val Thr Pro
 210 215

<210> 2432

<211> 312

<212> PRT

<213> Unknown (p89-dir-0-11 conceptual translation of range 1-935)

<220>

<221> VARIANT

<222> (1)...(312)

<223> Xaa = Any Amino Acid

<400>2432

```

Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
 1           5           10           15
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
           20           25           30
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
           35           40           45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
           50           55           60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
65           70           75           80
Met Leu Ala Asn His Leu Ser Gly Ser Lys Ser Ile Ser Phe Gly Gly
           85           90           95
Cys Leu Thr Gln Met Tyr Phe Met Ile Asp Leu Gly Asn Thr Asp Ser
           100          105          110
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
           115          120          125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
           130          135          140
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
145          150          155          160
Leu Leu Thr Ala Ser Leu Ser Phe Xaa Gly Asn Gln Glu Val Ala Asn
           165          170          175
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
           180          185          190
Arg Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Pro Val
           195          200          205
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
210          215          220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
225          230          235          240
Gly Ser His Leu Thr Val Val Cys Phe Val Tyr Gly Thr Val Met Gly
           245          250          255
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
           260          265          270
Thr Val Met Cys Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
           275          280          285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Asn
290          295          300
Lys Arg Ile Ser Ser Xaa Pro Met
305          310

```

<210> 2433

<211> 312

<212> PRT

<213> Unknown (p88-dir-0-11 conceptual translation of range 1-936)

<220>

<221> VARIANT

<222> (1)...(312)

<223> Xaa = Any Amino Acid

<400>2433

Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly

```

      1           5           10           15
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
      20           25           30
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
      35           40           45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
      50           55           60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
      65           70           75           80
Met Leu Ala Asn His Leu Ser Gly Ser Lys Ser Ile Ser Phe Gly Gly
      85           90           95
Cys Leu Thr Gln Met Tyr Phe Met Ile Asp Leu Gly Asn Thr Asp Ser
      100          105          110
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
      115          120          125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
      130          135          140
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
      145          150          155          160
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
      165          170          175
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
      180          185          190
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
      195          200          205
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
      210          215          220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
      225          230          235          240
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
      245          250          255
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
      260          265          270
Thr Val Met Cys Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
      275          280          285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Asn
      290          295          300
Lys Arg Ile Ser Ser Xaa Pro Met
305          310

```

<210> 2434

<211> 312

<212> PRT

<213> Unknown (p33-dir-0-11 conceptual translation of range 1-936)

<220>

<221> VARIANT

<222> (1)...(312)

<223> Xaa = Any Amino Acid

<400>2434

```

Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
      1           5           10           15
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
      20           25           30
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Leu Ala
      35           40           45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
      50           55           60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
      65           70           75           80

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Arg | Glu | Asn | Asn | Gln | Ser | Ser | Thr | Leu | Glu | Phe | Ile | Leu | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Thr | Gly | Gln | Gln | Glu | Gln | Glu | Asp | Phe | Phe | Tyr | Ile | Leu | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Ile | Tyr | Pro | Ile | Thr | Leu | Ile | Gly | Asn | Leu | Leu | Ile | Val | Leu | Ala |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Ile | Cys | Ser | Asp | Val | Arg | Leu | His | Asn | Pro | Met | Tyr | Phe | Leu | Leu | Ala |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Leu | Val | Asp | Ile | Phe | Phe | Ser | Ser | Val | Thr | Ile | Pro | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Met | Leu | Ala | Asn | His | Leu | Leu | Gly | Ser | Lys | Ser | Ile | Ser | Phe | Gly | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Leu | Thr | Gln | Met | Tyr | Phe | Met | Ile | Ala | Leu | Gly | Asn | Thr | Asp | Ser |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Tyr | Ile | Leu | Ala | Ala | Met | Ala | Tyr | Asp | Arg | Ala | Val | Ala | Ile | Ser | His |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Leu | His | Tyr | Thr | Thr | Ile | Met | Ser | Pro | Arg | Ser | Cys | Ile | Trp | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ile | Ala | Gly | Ser | Trp | Val | Ile | Gly | Asn | Ala | Asn | Ala | Leu | Pro | His | Thr |

```

145          150          155          160
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
          165          170          175
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
          180          185          190
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
          195          200          205
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
          210          215          220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
225          230          235          240
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
          245          250          255
Thr Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
          260          265          270
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
          275          280          285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Arg Lys Leu Phe Asn
          290          295          300
Lys Arg Ile Ser Ser Xaa Pro Met
305          310

```

<210> 2436

<211> 309

<212> PRT

<213> Unknown (pl80-dir-0-11 conceptual translation of range 1-927)

<400>2436

```

Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
 1          5          10          15
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
          20          25          30
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
          35          40          45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
          50          55          60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
65          70          75          80
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ser Ile Ser Phe Gly Gly
          85          90          95
Cys Leu Thr Gln Met Tyr Phe Met Ile Ala Leu Gly Asn Thr Asp Ser
          100          105          110
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
          115          120          125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
          130          135          140
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
145          150          155          160
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
          165          170          175
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
          180          185          190
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
          195          200          205
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
          210          215          220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
225          230          235          240
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
          245          250          255
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile

```

260 265 270
 Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
 275 280 285
 Ser Leu Arg Asn Arg Asp Val Lys Ala Ala Leu Arg Lys Leu Phe Asn
 290 295 300
 Lys Arg Ile Ser Ser
 305

<210> 2437

<211> 309

<212> PRT

<213> Unknown (p204-dir-0-11 conceptual translation of range 1-927)

<400>2437

Met Lys Lys Glu Asn Gln Ser Phe Asn Leu Asp Phe Ile Leu Leu Gly
 1 5 10 15
 Val Thr Ser Gln Gln Glu Gln Asn Asn Val Phe Phe Val Ile Phe Leu
 20 25 30
 Cys Ile Tyr Pro Ile Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu Ala
 35 40 45
 Ile Cys Ala Asp Ile Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
 50 55 60
 Asn Leu Ser Leu Val Asp Ile Ile Phe Ser Ser Val Thr Ile Pro Lys
 65 70 75 80
 Val Leu Ala Asn His Leu Leu Gly Ser Lys Phe Ile Ser Phe Gly Gly
 85 90 95
 Cys Leu Met Gln Met Tyr Phe Met Ile Ala Leu Ala Lys Ala Asp Ser
 100 105 110
 Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Cys
 115 120 125
 Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Leu Leu
 130 135 140
 Ile Ala Gly Ser Trp Val Ile Gly Asn Thr Ser Ala Leu Pro His Thr
 145 150 155 160
 Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
 165 170 175
 Phe Tyr Cys Asp Ile Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
 180 185 190
 His Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Leu
 195 200 205
 Pro Leu Leu Cys Ile Ile Val Ser Tyr Val Gln Val Phe Ser Thr Val
 210 215 220
 Phe Gln Val Pro Ser Thr Lys Ser Leu Phe Lys Ala Phe Cys Thr Cys
 225 230 235 240
 Gly Ser His Leu Thr Val Val Phe Leu Tyr Tyr Gly Thr Thr Met Gly
 245 250 255
 Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Pro Lys Asp Ala Val Ile
 260 265 270
 Thr Val Met Tyr Val Ala Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr
 275 280 285
 Ser Leu Arg Asn Trp Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Ser
 290 295 300
 Lys Arg Ile Ser Ser
 305

<210> 2438

<211> 214

<212> PRT

<213> Unknown (p179-dir-0-8 conceptual translation of range 2-643)

<400>2438


```

Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys Met Leu Ala
 1           5           10           15
Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly Cys Met Ala
          20           25           30
Gln Met Tyr Phe Met Ile Ser Leu Gly Asn Thr Asp Ser Tyr Ile Leu
          35           40           45
Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg Pro Leu His
          50           55           60
Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu Val Ala Gly
65           70           75           80
Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr Leu Leu Thr
          85           90           95
Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn Phe Tyr Cys
          100          105          110
Asp Ile Thr Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile Arg Phe Asn
          115          120          125
Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val Pro Leu Leu
          130          135          140
Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu Arg Val
145          150          155          160
Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly Ser His
          165          170          175
Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly Met Tyr Phe
          180          185          190
Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile Thr Val Met
          195          200          205
Tyr Thr Ala Val Thr Pro
          210

```

<210> 2439

<211> 214

<212> PRT

<213> Unknown (p191-dir-0-8 conceptual translation of range 2-643)

<400>2439

```

Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys Met Leu Ala
 1           5           10           15
Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly Cys Met Ala
          20           25           30
Gln Met Tyr Phe Met Ile Gly Leu Ala Asn Thr Asp Ser Tyr Ile Leu
          35           40           45
Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg Pro Leu His
          50           55           60
Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu Val Ala Gly
65           70           75           80
Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr Leu Leu Thr
          85           90           95
Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn Phe Tyr Cys
          100          105          110
Asp Ile Thr Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile Arg Phe Asn
          115          120          125
Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val Pro Leu Leu
          130          135          140
Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu Arg Val
145          150          155          160
Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly Ser His
          165          170          175
Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly Met Tyr Phe
          180          185          190
Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile Thr Val Met
          195          200          205

```

Tyr Thr Ala Val Thr Pro
210

<210> 2440

<211> 222

<212> PRT

<213> Unknown (3983387-dir-0-8 conceptual translation of range 1-666)

<400>2440

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Asn | Leu | Ser | Phe | Val | Asp | Val | Cys | Phe | Thr | Thr | Asn | Leu | Ile | Pro |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Arg | Leu | Leu | Ala | Gly | His | Val | Ala | Gly | Thr | Arg | Thr | Ile | Ser | Tyr | Val |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| His | Cys | Leu | Thr | Gln | Thr | Tyr | Phe | Leu | Ile | Ser | Phe | Ala | Asn | Val | Asp |
| | | 35 | | | | | 40 | | | | 45 | | | | |
| Thr | Phe | Leu | Leu | Ala | Ala | Met | Ala | Leu | Asp | Arg | Phe | Val | Ala | Ile | Cys |
| | 50 | | | | 55 | | | | | 60 | | | | | |
| Tyr | Pro | Leu | Gln | Tyr | His | Thr | Ile | Ile | Thr | Pro | Gln | Leu | Cys | Val | Gly |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Leu | Ala | Ala | Val | Val | Trp | Met | Cys | Ser | Ala | Leu | Ile | Ser | Leu | Met | His |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Thr | Leu | Leu | Met | Ser | Arg | Leu | Ser | Phe | Cys | Ser | Ser | Ile | Pro | Glu | Ile |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Ser | His | Phe | Tyr | Cys | Asp | Ala | Tyr | Leu | Leu | Met | Lys | Leu | Ala | Cys | Ser |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Asp | Thr | Arg | Val | Asn | Gln | Leu | Val | Phe | Leu | Gly | Ala | Val | Val | Leu | Phe |
| | 130 | | | | 135 | | | | | 140 | | | | | |
| Val | Ala | Pro | Cys | Ile | Leu | Ile | Val | Val | Ser | Tyr | Val | Arg | Ile | Thr | Met |
| 145 | | | | | 150 | | | | 155 | | | | | 160 | |
| Val | Val | Leu | Gln | Ile | Pro | Ser | Ala | Lys | Gly | Arg | His | Lys | Thr | Phe | Ser |
| | | | 165 | | | | | 170 | | | | | 175 | | |
| Thr | Cys | Ser | Ser | His | Leu | Ser | Val | Val | Thr | Leu | Phe | Tyr | Gly | Thr | Val |
| | | 180 | | | | | 185 | | | | | 190 | | | |
| Leu | Gly | Ile | Tyr | Ile | Arg | Pro | Pro | Asp | Ser | Phe | Ser | Thr | Gln | Asp | Thr |
| | 195 | | | | | 200 | | | | | 205 | | | | |
| Val | Ala | Thr | Ile | Met | Tyr | Thr | Val | Val | Thr | Pro | Met | Leu | Asn | | |
| | 210 | | | | | 215 | | | | | 220 | | | | |

<210> 2441

<211> 314

<212> PRT

<213> Unknown (205837-dir-0-11 conceptual translation of range 1-942)

<400>2441

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Arg | Arg | Asn | Gln | Thr | Ala | Ile | Ser | Gln | Phe | Phe | Leu | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Pro | Phe | Pro | Pro | Glu | Tyr | Gln | His | Leu | Phe | Tyr | Ala | Leu | Phe | Leu |
| | | 20 | | | | | 25 | | | | | 30 | | | |
| Ala | Met | Tyr | Leu | Thr | Thr | Leu | Leu | Gly | Asn | Leu | Ile | Ile | Ile | Ile | Leu |
| | | 35 | | | | 40 | | | | | 45 | | | | |
| Ile | Leu | Leu | Asp | Ser | His | Leu | His | Thr | Pro | Met | Tyr | Leu | Phe | Leu | Ser |
| | 50 | | | | 55 | | | | | 60 | | | | | |
| Asn | Leu | Ser | Phe | Ala | Asp | Leu | Cys | Phe | Ser | Ser | Val | Thr | Met | Pro | Lys |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Leu | Leu | Gln | Asn | Met | Gln | Ser | Gln | Val | Pro | Ser | Ile | Pro | Tyr | Ala | Gly |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Cys | Leu | Ala | Gln | Ile | Tyr | Phe | Phe | Leu | Phe | Phe | Gly | Asp | Leu | Gly | Asn |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Phe | Leu | Leu | Val | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Phe |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Pro | Leu | His | Tyr | Met | Ser | Ile | Met | Ser | Pro | Lys | Leu | Cys | Val | Ser | Leu |

```

      130              135              140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
145              150              155              160
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Ser Val Ile Pro His
      165              170              175
Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
      180              185              190
His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
      195              200              205
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
      210              215              220
Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser Thr
      225              230              235              240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
      245              250              255
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
      260              265              270
Val Met Ser Leu Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe
      275              280              285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Asp Ala Leu Glu Lys Ile
      290              295              300
Met Cys Lys Lys Gln Ile Pro Ser Phe Leu
305              310

```

<210> 2442

<211> 221

<212> PRT

<213> Unknown (3769630-dir-0-8 conceptual translation of range 1-663)

<400>2442

```

Leu Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro
1      5      10      15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
      20      25      30
Gly Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly
      35      40      45
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
      50      55      60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
      65      70      75      80
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
      85      90      95
Thr Leu Leu Met Ala Arg Leu Ser Phe Arg Glu Asp Ser Val Ile Pro
      100      105      110
His Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Pro Asp
      115      120      125
Thr His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val
      130      135      140
Val Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser
      145      150      155      160
Ser Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser
      165      170      175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Ile Tyr Gly Thr Val
      180      185      190
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
      195      200      205
Thr Val Met Ser Leu Met Tyr Thr Met Val Thr Pro Met
      210      215      220

```

<210> 2443

<211> 314

<212> PRT

<213> Unknown (1504111-dir-0-11 conceptual translation of range 1-942)

<400>2443

```

Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly
 1          5          10          15
Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
          20          25          30
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
          35          40          45
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
          50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
          65          70          75          80
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
          85          90          95
Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
          100          105          110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
          115          120          125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
          130          135          140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
          145          150          155          160
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
          165          170          175          180
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
          180          185          190
Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
          195          200          205
Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
          210          215          220
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Thr
          225          230          235          240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
          245          250          255
Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
          260          265          270
Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
          275          280          285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Arg Ile
          290          295          300
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
          305          310

```

<210> 2444

<211> 221

<212> PRT

<213> Unknown (3769633-dir-0-8 conceptual translation of range 1-663)

<400>2444

```

Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
 1          5          10          15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
          20          25          30
Gly Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly
          35          40          45
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
          50          55          60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
          65          70          75          80

```

```

Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
      85                      90                      95
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro
      100                      105                      110
His Phe Phe Cys Asp Thr Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
      115                      120                      125
Thr Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu
      130                      135                      140
Val Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser
      145                      150                      155                      160
Ser Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Glu Ala Phe Ser
      165                      170                      175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val
      180                      185                      190
Ile Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu
      195                      200                      205
Thr Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met
      210                      215                      220

```

<210> 2445

<211> 221

<212> PRT

<213> Unknown (3769632-dir-0-8 conceptual translation of range 1-663)

<400>2445

```

Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
  1                      5                      10                      15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Val
      20                      25                      30
Gly Cys Leu Ser Gln Ile Tyr Phe Leu Phe Phe Gly Asp Leu Gly
      35                      40                      45
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys
      50                      55                      60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
      65                      70                      75                      80
Leu Val Val Leu Ser Trp Val Arg Thr Thr Phe His Ala Met Leu His
      85                      90                      95
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro
      100                      105                      110
His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
      115                      120                      125
Thr Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu
      130                      135                      140
Val Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser
      145                      150                      155                      160
Ser Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser
      165                      170                      175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val
      180                      185                      190
Ile Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu
      195                      200                      205
Thr Val Met Ser Leu Met Tyr Thr Ala Val Thr Pro Met
      210                      215                      220

```

<210> 2446

<211> 157

<212> PRT

<213> Unknown (902347-dir-0-6 conceptual translation of range 2-472)

<400>2446

Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys

```

      1           5           10           15
Val Ser Leu Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
      20           25           30
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
      35           40           45
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
      50           55           60
Ser Asp Thr His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu
      65           70           75           80
Ile His Val Ile Pro Leu Val Leu Ile Leu Val Ser Tyr Ala Gln Ile
      85           90           95
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
      100          105          110
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
      115          120          125
Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
      130          135          140
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr
      145          150          155

```

<210> 2447

<211> 157

<212> PRT

<213> Unknown (902682-dir-0-6 conceptual translation of range 2-472)

<400>2447

```

Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys
      1           5           10           15
Val Ser Leu Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
      20           25           30
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
      35           40           45
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
      50           55           60
Ser Asp Thr His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu
      65           70           75           80
Ile Leu Val Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Gln Ile
      85           90           95
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
      100          105          110
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
      115          120          125
Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
      130          135          140
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr
      145          150          155

```

<210> 2448

<211> 221

<212> PRT

<213> Unknown (3769627-dir-0-8 conceptual translation of range 1-663)

<400>2448

```

Gly Asn Ile Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
      1           5           10           15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
      20           25           30
Gly Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu
      35           40           45
Ser Phe Leu Leu Glu Ala Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys
      50           55           60

```

```

Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
65          70          75          80
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
      85          90          95
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro
      100         105         110
His Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp
      115         120         125
Thr His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile
      130         135         140
Val Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala
145          150          155          160
Ser Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser
      165         170         175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
      180         185         190
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
      195         200         205
Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
      210         215         220

```

<210> 2449

<211> 221

<212> PRT

<213> Unknown (3769629-dir-0-8 conceptual translation of range 1-663)

<220>

<221> VARIANT

<222> (1)...(221)

<223> Xaa = Any Amino Acid

<400>2449

```

Ser Asn Ile Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
1          5          10          15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
      20          25          30
Gly Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu
      35          40          45
Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys
      50          55          60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
65          70          75          80
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
      85          90          95
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro
      100         105         110
His Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp
      115         120         125
Arg His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile
      130         135         140
Val Ile Pro Phe Val Leu Ile Ile Val Ser Xaa Ala Arg Val Val Ala
145          150          155          160
Ser Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser
      165         170         175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
      180         185         190
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
      195         200         205
Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
      210         215         220

```

<210> 2450

<211> 314

<212> PRT

<213> Unknown (205845-dir-0-11 conceptual translation of range 1-942)

<400>2450

```

Met Thr Glu Glu Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Phe
 1          5          10          15
Leu Pro Ile Pro Ser Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
          20          25          30
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Ile Leu
          35          40          45
Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
          50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
65          70          75          80
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Phe Ala Gly
          85          90          95
Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu Ser
          100          105          110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
          115          120          125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
          130          135          140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
145          150          155          160
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
          165          170          175
Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
          180          185          190
His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile Val
          195          200          205
Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala Ser
          210          215          220
Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser Thr
225          230          235          240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
          245          250          255
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
          260          265          270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
          275          280          285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg Val
          290          295          300
Leu Cys Lys Lys Lys Ile Thr Phe Cys Leu
305          310

```

<210> 2451

<211> 192

<212> PRT

<213> Unknown (2921663-dir-1-7 conceptual translation of range 101-676)

<400>2451

```

Met Tyr Phe Phe Leu Tyr Phe Thr Asp Leu Glu Ser Phe Leu Leu Val
 1          5          10          15
Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Met His Tyr
          20          25          30
Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile Met Ser Pro Met
          35          40          45
Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu Thr Thr Phe His
          50          55          60

```


Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp
 65 70 75 80
 Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu
 85 90 95
 Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly
 100 105 110
 Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala
 115 120 125
 Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys
 130 135 140
 Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe
 145 150 155 160
 Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser
 165 170 175
 Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro
 180 185 190

<210> 2452

<211> 323

<212> PRT

<213> Unknown (p25-dir-0-11 conceptual translation of range 1-969)

<400>2452

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Met His Tyr Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile
 130 135 140
 Met Ser Pro Met Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu
 145 150 155 160
 Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys
 165 170 175
 Phe Cys Ala Asp Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala
 180 185 190
 Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile
 195 200 205
 Phe Ile Met Gly Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu
 210 215 220
 Gly Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser
 225 230 235 240
 Lys Gly Ile Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
 245 250 255
 Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser
 260 265 270
 Ala Asn Ser Ser Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr
 275 280 285
 Val Val Thr Pro Met Leu Thr Pro Phe Ile Tyr Ser Leu Arg Asn Arg
 290 295 300

Asp Met Lys Gly Ala Leu Glu Arg Val Ile Cys Lys Arg Lys Asn Pro
 305 310 315 320
 Phe Leu Leu

<210> 2453

<211> 314

<212> PRT

<213> Unknown (p181-dir-0-11 conceptual translation of range 1-942)

<400>2453

Met Met Glu Gln Asn Gln Thr Ser Thr Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
 130 135 140
 Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
 195 200 205
 Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
 260 265 270
 Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
 290 295 300
 Ile Cys Lys Arg Lys Asn Pro Phe Leu Ile
 305 310

<210> 2454

<211> 149

<212> PRT

<213> Unknown (p166-dir-0-6 conceptual translation of range 2-448)

<400>2454

Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
 1 5 10 15
 Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Val Asp Cys Leu Thr

20 25 30
 Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Leu Glu Ser Phe Leu Leu
 35 40 45
 Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
 50 55 60
 Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ala Leu Val Ala Leu
 65 70 75 80
 Ser Trp Val Leu Thr Phe His Ala Met Leu His Thr Leu Leu Met
 85 90 95
 Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Val Pro His Phe Phe Cys
 100 105 110
 Asp Met Pro Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn
 115 120 125
 Glu Ser Gly Ile Phe Ile Thr Gly Gly Leu Ile Leu Gly Ile Pro Phe
 130 135 140
 Leu Leu Ile Leu Gly
 145

<210> 2455

<211> 314

<212> PRT

<213> Unknown (p17-dir-0-11 conceptual translation of range 1-942)

<400>2455

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Phe Leu Phe Gly Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ala Leu
 130 135 140
 Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Phe Ser Asp Thr
 180 185 190
 Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val
 195 200 205
 Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
 260 265 270
 Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ser Arg Val

290 295 300
 Ile His Gln Lys Lys Thr Phe Phe Ser Leu
 305 310

<210> 2456

<211> 314

<212> PRT

<213> Unknown (p90-dir-0-11 conceptual translation of range 1-942)

<400>2456

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met His Phe Phe Leu Phe Gly Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
 130 135 140
 Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
 195 200 205
 Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Phe Lys Gly Ile Cys Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
 260 265 270
 Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
 290 295 300
 Ile Cys Lys Arg Lys Asn Pro Phe Leu Leu
 305 310

<210> 2457

<211> 314

<212> PRT

<213> Unknown (p175-dir-0-11 conceptual translation of range 1-942)

<400>2457

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30

Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
 130 135 140
 Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val
 195 200 205
 Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
 260 265 270
 Val Met Ala Met Ile Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ser Arg Val
 290 295 300
 Ile His Gln Lys Lys Thr Phe Phe Ser Leu
 305 310

<210> 2458

<211> 314

<212> PRT

<213> Unknown (p170-dir-0-11 conceptual translation of range 1-942)

<400>2458

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Leu
 130 135 140

```

Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
145          150          155          160
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
          165          170          175
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
          180          185          190
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
          195          200          205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
          210          215          220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
225          230          235          240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
          245          250          255
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Glu Thr
          260          265          270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
          275          280          285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
          290          295          300
Ile Cys Lys Arg Lys Asn Pro Phe Leu Leu
305          310

```

<210> 2459

<211> 314

<212> PRT

<213> Unknown (p31-dir-0-11 conceptual translation of range 1-942)

<400>2459

```

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
1      5      10      15
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
          20      25      30
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
          35      40      45
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
          50      55      60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
65      70      75      80
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
          85      90      95
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
          100      105      110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
          115      120      125
Ala Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Leu
          130      135      140
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
145      150      155      160
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
          165      170      175
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
          180      185      190
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
          195      200      205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
          210      215      220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
225      230      235      240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
          245      250      255

```

Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Glu Thr
 260 265 270
 Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Gly Asp Met Lys Gly Ala Leu Ser Arg Val
 290 295 300
 Ile His Gln Lys Lys Thr Phe Phe Ser Leu
 305 310

<210> 2460

<211> 324

<212> PRT

<213> Unknown (890-dir-5-12 conceptual translation of range 642-1613)

<220>

<221> VARIANT

<222> (1)...(324)

<223> Xaa = Any Amino Acid

<400>2460

Arg Gln Ser Met Thr Glu Lys Asn Gln Thr Val Val Ser Glu Phe Val
 1 5 10 15
 Leu Leu Gly Leu Pro Ile Asp Pro Asp Gln Arg Asp Leu Phe Tyr Ala
 20 25 30
 Leu Phe Leu Ala Met Tyr Val Thr Thr Ile Leu Gly Asn Leu Leu Ile
 35 40 45
 Ile Val Leu Ile Gln Leu Asp Ser His Leu His Thr Pro Met Tyr Leu
 50 55 60
 Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr
 65 70 75 80
 Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro
 85 90 95
 Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp
 100 105 110
 Leu Glu Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala
 115 120 125
 Ile Cys Phe Pro Leu His Tyr Thr Thr Ile Met Ser Pro Lys Leu Cys
 130 135 140
 Phe Ser Leu Leu Val Leu Ser Trp Val Leu Thr Met Phe His Ala Val
 145 150 155 160
 Leu His Thr Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asn Thr Ile
 165 170 175
 Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser
 180 185 190
 Asp Thr Gln Val Asn Glu Leu Val Ile Phe Ile Met Gly Gly Leu Ile
 195 200 205
 Leu Val Ile Pro Phe Leu Leu Ile Ile Thr Ser Tyr Ala Arg Ile Val
 210 215 220
 Ser Ser Ile Leu Lys Val Pro Ser Ala Ile Gly Ile Cys Lys Val Phe
 225 230 235 240
 Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr
 245 250 255
 Val Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys
 260 265 270
 Glu Thr Ile Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn
 275 280 285
 Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Arg
 290 295 300
 Arg Val Ile Cys Arg Lys Lys Ile Thr Phe Ser Val Xaa Trp Xaa His
 305 310 315 320
 Leu Ile Leu Leu

<210> 2461

<211> 162

<212> PRT

<213> Unknown (4877306-dir-0-6 conceptual translation of range 2-487)

<400>2461

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ala | Ile | Cys | Phe | Pro | Leu | His | Tyr | Thr | Thr | Ile | Met | Ser | Pro | Arg |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Cys | Leu | Phe | Leu | Val | Leu | Leu | Pro | Trp | Ile | Leu | Thr | Thr | Phe | His |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ala | Met | Leu | His | Thr | Leu | Leu | Met | Ala | Arg | Leu | His | Phe | Cys | Glu | Asp |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Asn | Val | Ile | Pro | His | Phe | Phe | Cys | Asp | Ser | Ser | Ala | Leu | Leu | Lys | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Cys | Ser | Asp | Thr | Arg | Val | Asn | Glu | Leu | Val | Ile | Phe | Phe | Val | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gly | Leu | Ile | Ile | Ile | Ile | Pro | Phe | Leu | Leu | Ile | Ile | Met | Ser | Tyr | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Arg | Ile | Val | Ser | Ser | Ile | Leu | Lys | Val | Pro | Ser | Ala | Lys | Gly | Ile | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Lys | Ala | Phe | Ser | Thr | Cys | Gly | Ser | His | Leu | Thr | Val | Val | Ser | Leu | Phe |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Tyr | Gly | Thr | Ile | Ile | Gly | Leu | Tyr | Leu | Cys | Pro | Ser | Ala | His | Asn | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Thr | Val | Lys | Glu | Thr | Val | Met | Ser | Met | Met | Tyr | Thr | Val | Val | Ala | Pro |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Met | Leu | | | | | | | | | | | | | | |

<210> 2462

<211> 216

<212> PRT

<213> Unknown (p194-dir-0-8 conceptual translation of range 2-649)

<400>2462

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Thr | Asp | Leu | Cys | Phe | Ser | Thr | Val | Thr | Met | Pro | Asn | Phe | Leu | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Met | Gln | Ser | Gln | Val | Ser | Ser | Ile | Pro | Tyr | Ala | Gly | Cys | Leu | Ala |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Met | Tyr | Phe | Phe | Leu | Phe | Phe | Gly | Asp | Val | Glu | Ser | Leu | Leu | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Val | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Phe | Pro | Leu | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Tyr | Thr | Arg | Ile | Met | Ser | Pro | Asn | Leu | Cys | Val | Ser | Met | Val | Leu | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Trp | Ala | Leu | Thr | Thr | Leu | Cys | Ala | Met | Leu | His | Thr | Leu | Leu | Leu |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Thr | Arg | Leu | Ser | Phe | Cys | Lys | Asn | Asn | Val | Ile | Pro | His | Phe | Phe | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Leu | Ser | Ala | Leu | Leu | Lys | Leu | Ala | Cys | Ser | Asp | Ile | His | Ile | Asn |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Glu | Leu | Met | Ile | Met | Ile | Ile | Gly | Ala | Leu | Val | Val | Ile | Leu | Pro | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Leu | Ile | Ile | Val | Ser | Tyr | Ala | His | Ile | Val | Ser | Ser | Ile | Leu | Lys |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Val | Pro | Ser | Thr | Arg | Gly | Ile | His | Lys | Val | Phe | Ser | Thr | Cys | Gly | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| His | Leu | Ser | Val | Val | Ser | Leu | Phe | Tyr | Gly | Ser | Val | Ile | Val | Leu | Tyr |
| | | | 180 | | | | | 185 | | | | | | 190 | |


```
<210> 2463
<211> 157
<212> PRT
<213> Unknown (902674-dir-0-6 conceptual translation of range 2-472)
```

```
<210> 2464
<211> 216
<212> PRT
<213> Unknown (p197-dir-0-8 conceptual translation of range 2-649)
```

| | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400>2464 | | | | | | | | | | | | | | | |
| Phe | Thr | Asp | Leu | Xaa | Phe | Ser | Ser | Val | Thr | Met | Pro | Lys | Leu | Leu | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Met | Gln | Ser | Gln | Val | Pro | Ser | Ile | Pro | Tyr | Ala | Gly | Cys | Leu | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Met | Tyr | Phe | Leu | Leu | Phe | Phe | Gly | Asp | Leu | Glu | Ser | Phe | Leu | Leu |
| | 35 | | | | | 40 | | | | | | 45 | | | |
| Val | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Phe | Pro | Leu | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Tyr | Thr | Ser | Ile | Met | Ser | Pro | Arg | Leu | Cys | Val | Ser | Leu | Val | Leu | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Trp | Leu | Leu | Thr | Met | Ser | His | Ser | Met | Leu | His | Thr | Leu | Leu | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Thr | Arg | Leu | Ser | Phe | Cys | Glu | Asn | Asn | Val | Ile | Pro | His | Phe | Phe | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Leu | Ser | Ala | Leu | Leu | Lys | Leu | Ala | Cys | Ser | Asp | Ile | His | Ile | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Glu | Leu | Val | Ile | Leu | Ile | Ile | Gly | Gly | Leu | Val | Val | Ile | Leu | Pro | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |

Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu Lys
 145 150 155 160
 Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
 180 185 190
 Leu Cys Pro Ser Ala Asn Asn Ser Thr Leu Lys Asp Thr Val Met Ser
 195 200 205
 Met Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2465

<211> 216

<212> PRT

<213> Unknown (p195-dir-0-8 conceptual translation of range 2-650)

<400>2465

Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu Leu
 1 5 10 15
 Asn Met Gln Ser Gln Ile Pro Ser Ile Ser Tyr Ala Ser Cys Leu Ala
 20 25 30
 Gln Met Tyr Phe Phe Leu Phe Phe Gly Ala Leu Glu Asn Phe Leu Leu
 35 40 45
 Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
 50 55 60
 Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys Val Ser Met Val Val Met
 65 70 75 80
 Cys Trp Val Leu Thr Thr Phe Asp Ala Met Leu His Thr Leu Leu Met
 85 90 95
 Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His Phe Phe Cys
 100 105 110
 Asp Met Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr His Val Asn
 115 120 125
 Glu Val Val Ile Phe Ile Ile Gly Gly Leu Gly Val Val Leu Pro Phe
 130 135 140
 Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu Lys
 145 150 155 160
 Val Pro Ser Thr Gln Gly Ile Gln Lys Val Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
 180 185 190
 Leu Gly Pro Ser Ala Tyr Tyr Ser Thr Leu Lys Asp Thr Val Met Ser
 195 200 205
 Met Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2466

<211> 157

<212> PRT

<213> Unknown (902672-dir-0-6 conceptual translation of range 2-472)

<400>2466

Ile Cys Phe Pro Leu His Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys
 1 5 10 15
 Val Ser Met Val Val Met Cys Arg Val Leu Thr Thr Phe Asp Ala Met
 20 25 30
 Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
 35 40 45
 Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
 50 55 60
 Ser Asp Thr His Val Asn Glu Val Val Ile Phe Ile Ile Gly Gly Leu

```

65          70          75          80
Gly Val Val Leu Pro Phe Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile
      85          90          95
Ile Ser Ser Ile Leu Lys Val Pro Ser Thr Gln Gly Ile Gln Lys Val
      100         105         110
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
      115         120         125
Thr Ile Ile Gly Leu Tyr Leu Gly Pro Ser Ala Tyr Tyr Ser Thr Leu
      130         135         140
Lys Asp Thr Val Met Ser Met Met Tyr Thr Val Val Thr
145          150          155

```

<210> 2467

<211> 216

<212> PRT

<213> Unknown (p196-dir-0-8 conceptual translation of range 2-649)

<400>2467

```

Phe Ser Asp Phe Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
1      5      10      15
Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly Cys Leu Ala
      20      25      30
Gln Met Tyr Phe Phe Leu Leu Phe Ala Asp Leu Glu Ser Phe Leu Leu
      35      40      45
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
      50      55      60
Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Leu Cys Leu Val Ala Leu
65      70      75      80
Ser Trp Leu Leu Thr Thr Val Ile Ser Leu Ser His Thr Leu Leu Met
      85      90      95
Ala Arg Leu Ser Phe Cys Ala Asn Asn Val Ile Pro His Phe Phe Cys
      100     105     110
Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile Gln Ile Asn
      115     120     125
Lys Leu Met Ile Phe Ile Leu Gly Gly Leu Val Ile Ile Val Pro Phe
      130     135     140
Leu Leu Ile Phe Ser Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys
145     150     155     160
Val Pro Ser Ser Arg Ser Ile Arg Lys Ala Phe Ser Thr Cys Gly Ser
      165     170     175
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
      180     185     190
Leu Cys Pro Ser Ala Asn Asn Ser Thr Ile Lys Glu Thr Val Met Ala
      195     200     205
Val Met Tyr Thr Val Val Thr Pro
210          215

```

<210> 2468

<211> 216

<212> PRT

<213> Unknown (p91-dir-0-8 conceptual translation of range 2-649)

<400>2468

```

Phe Ser Asp Met Cys Phe Ser Ser Val Ser Ile Pro Lys Leu Leu Val
1      5      10      15
Asn Met Gln Ser Lys Lys Pro Ala Ile Pro Tyr Ala Gly Cys Leu Ser
      20      25      30
Gln Met Tyr Phe Phe Leu Phe Phe Ala Asp Leu Glu Ser Phe Leu Leu
      35      40      45
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
50          55          60

```

```

Tyr Ile Val Ile Met Ser Pro Lys Leu Cys Ser Ser Leu Val Val Leu
65          70          75          80
Ser Trp Val Leu Thr Ala Phe His Ala Leu Leu His Thr Leu Leu Met
          85          90          95
Ser Arg Leu Ser Phe Cys Ala Asn Asn Val Ile Pro His Phe Phe Cys
          100         105         110
Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr Gln Pro Asn
          115         120         125
Glu Leu Val Ile Phe Val Thr Gly Gly Leu Ile Leu Val Val Pro Phe
          130         135         140
Leu Leu Ile Ile Thr Ser Tyr Ala His Ile Ile Ser Ser Ile Leu Arg
145          150         155         160
Val Pro Ser Val Arg Gly Ile Arg Lys Ala Phe Ser Thr Cys Gly Ser
          165         170         175
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr
          180         185         190
Leu Cys Pro Ser Thr Asn Asn Ser Thr Val Lys Glu Thr Val Met Ser
          195         200         205
Ile Met Tyr Thr Val Val Thr Pro
          210         215

```

<210> 2469

<211> 314

<212> PRT

<213> Unknown (p29-dir-0-11 conceptual translation of range 1-942)

<400>2469

```

Met Met Lys Lys Asn Gln Thr Met Ile Ser Glu Phe Leu Leu Leu Gly
1          5          10          15
Leu Pro Ile Gln Pro Glu Gln Arg Asn Leu Phe Tyr Ala Leu Phe Leu
          20          25          30
Ala Val Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Val Ile Val Leu
          35          40          45
Ile Arg Leu Asp Ser His Leu His Met Pro Met Tyr Leu Cys Leu Ser
          50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
65          70          75          80
Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Phe Ala Asp
          85          90          95
Cys Leu Ala Gln Met Tyr Phe His Leu Phe Tyr Gly Val Leu Glu Ser
          100         105         110
Phe Leu Leu Val Val Met Ala Tyr His Cys Tyr Val Ala Ile Cys Phe
          115         120         125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Lys Cys Cys Leu Gly Leu
          130         135         140
Leu Thr Leu Ser Trp Leu Leu Thr Thr Ala His Ala Thr Leu His Thr
145          150         155         160
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Glu Asn Val Ile Pro His
          165         170         175
Phe Phe Cys Asp Thr Ser Thr Leu Leu Lys Leu Ala Cys Ser Asn Thr
          180         185         190
Gln Val Asn Gly Trp Val Met Phe Phe Met Gly Gly Leu Ile Leu Val
          195         200         205
Ile Pro Phe Leu Leu Leu Ile Met Ser Cys Ala Arg Ile Val Ser Thr
          210         215         220
Ile Leu Arg Val Pro Ser Thr Gly Gly Ile Gln Lys Ala Phe Ser Thr
225          230         235         240
Cys Gly Pro His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
          245         250         255
Gly Leu Tyr Leu Cys Pro Leu Thr Asn His Asn Thr Val Lys Asp Thr
          260         265         270

```

Val Met Ala Val Met Tyr Thr Gly Val Thr His Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Arg Gly Thr Leu Gly Arg Val
 290 295 300
 Phe Ser Thr Lys Lys Ile Phe Leu Ser Leu
 305 310

<210> 2470

<211> 314

<212> PRT

<213> Unknown (p132-dir-0-11 conceptual translation of range 1-942)

<400>2470

Met Thr Lys Lys Asn Gln Thr Met Ile Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Phe Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35 40 45
 Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Cys Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Phe Ala Asp
 85 90 95
 Cys Leu Ala Gln Met Tyr Phe His Leu Phe Tyr Gly Val Leu Glu Ser
 100 105 110
 Phe Leu Leu Val Val Met Ala Tyr His Cys Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu Gln Tyr Thr Thr Ile Met Ser Ser Lys Gly Cys Leu Ala Leu
 130 135 140
 Leu Thr Leu Ser Trp Leu Leu Thr Thr Ala His Ala Arg Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Thr Ser Thr Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Gln Val Asn Gly Trp Val Met Phe Phe Thr Gly Gly Leu Ile Leu Val
 195 200 205
 Ile Pro Phe Leu Leu Leu Ile Met Ser Tyr Ala Arg Ile Leu Ser Thr
 210 215 220
 Ile Leu Arg Val Pro Cys Ala Gly Gly Ile Gln Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Pro His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
 245 250 255
 Gly Leu Tyr Leu Cys Pro Ser Thr Asn His Asn Thr Val Lys Asp Thr
 260 265 270
 Val Met Ala Val Met Tyr Thr Gly Val Thr His Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Arg Gly Asn Pro Gly Gln Ser
 290 295 300
 Leu Gln His Lys Glu Asn Phe Phe Val Phe
 305 310

<210> 2471

<211> 310

<212> PRT

<213> Unknown (205831-dir-0-11 conceptual translation of range 1-930)

<400>2471

Met Asn Asn Gln Thr Phe Ile Thr Gln Phe Leu Leu Leu Gly Leu Pro

| | | | |
|---|---|-----|-----|
| 1 | 5 | 10 | 15 |
| Ile Pro Glu Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu Val Met | | | |
| 20 | | 25 | 30 |
| Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Val Gln | | | |
| 35 | | 40 | 45 |
| Leu Asp Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu | | | |
| 50 | | 55 | 60 |
| Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu | | | |
| 65 | | 70 | 75 |
| Gln Asn Met Arg Ser Gln Asp Thr Ser Ile Pro Tyr Gly Gly Cys Leu | | | |
| 85 | | 90 | 95 |
| Ala Gln Thr Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu | | | |
| 100 | | 105 | 110 |
| Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu | | | |
| 115 | | 120 | 125 |
| His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu Val Leu | | | |
| 130 | | 135 | 140 |
| Leu Leu Trp Met Leu Thr Thr Ser His Ala Met Met His Thr Leu Leu | | | |
| 145 | | 150 | 155 |
| Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Val Leu Asn Phe Phe | | | |
| 165 | | 170 | 175 |
| Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Ile | | | |
| 180 | | 185 | 190 |
| Asn Glu Leu Met Ile Phe Ile Met Ser Thr Leu Leu Ile Ile Ile Pro | | | |
| 195 | | 200 | 205 |
| Phe Phe Leu Ile Val Met Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu | | | |
| 210 | | 215 | 220 |
| Lys Val Pro Ser Thr Gln Gly Ile Cys Lys Val Phe Ser Thr Cys Gly | | | |
| 225 | | 230 | 235 |
| Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu | | | |
| 245 | | 250 | 255 |
| Tyr Leu Cys Pro Ala Gly Asn Asn Ser Thr Val Lys Glu Met Val Met | | | |
| 260 | | 265 | 270 |
| Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr | | | |
| 275 | | 280 | 285 |
| Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys | | | |
| 290 | | 295 | 300 |
| Ser Met Lys Ile Thr Leu | | | |
| 305 | | | 310 |

<210> 2472

<211> 221

<212> PRT

<213> Unknown (3769635-dir-0-8 conceptual translation of range 1-663)

<400>2472

| | | | |
|---|---|-----|-----|
| Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Leu | | | |
| 1 | 5 | 10 | 15 |
| Lys Leu Leu Gln Asn Ile Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala | | | |
| 20 | | 25 | 30 |
| Gly Cys Leu Thr Gln Ile Phe Phe Leu Leu Phe Gly Tyr Leu Gly | | | |
| 35 | | 40 | 45 |
| Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys | | | |
| 50 | | 55 | 60 |
| Phe Pro Leu His Tyr Thr Asn Ile Met Ser His Lys Leu Cys Thr Cys | | | |
| 65 | | 70 | 75 |
| Leu Leu Leu Val Phe Trp Ile Met Thr Ser Ser His Ala Met Val His | | | |
| 85 | | 90 | 95 |
| Thr Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu | | | |
| 100 | | 105 | 110 |
| Asn Phe Phe Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp | | | |

```

      115              120              125
Thr Tyr Val Asn Glu Leu Met Ile His Ile Met Gly Val Ile Ile Ile
      130              135              140
Val Ile Pro Phe Val Leu Ile Val Ile Ser Tyr Ala Lys Ile Ile Ser
145              150              155              160
Ser Ile Leu Lys Val Pro Ser Thr Gln Ser Ile His Lys Val Phe Ser
      165              170              175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
      180              185              190
Ile Gly Leu Tyr Leu Cys Pro Ser Gly Asp Asn Phe Ser Leu Lys Gly
      195              200              205
Ser Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
      210              215              220

```

<210> 2473

<211> 221

<212> PRT

<213> Unknown (3769637-dir-0-8 conceptual translation of range 1-663)

<400>2473

```

Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
1      5      10      15
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala
      20      25      30
Gly Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Ala Asp Met Glu
      35      40      45
Ser Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
      50      55      60
Phe Pro Leu His Tyr Thr Thr Ile Met Ser Thr Lys Val Cys Ala Ser
      65      70      75      80
Leu Leu Ile Leu Leu Trp Met Leu Thr Thr Ser His Ala Leu Leu His
      85      90      95
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu
      100      105      110
His Phe Phe Cys Asp Ile Thr Ala Leu Leu Lys Leu Ser Cys Ser Asp
      115      120      125
Thr Tyr Val Asn Glu Met Met His Ile Leu Gly Gly Leu Ile Ser
      130      135      140
Val Ile Pro Phe Leu Phe Ile Val Met Ser Tyr Val Arg Ile Phe Phe
145      150      155      160
Ser Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile His Lys Val Phe Ser
      165      170      175
Thr Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile
      180      185      190
Phe Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu
      195      200      205
Ile Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
      210      215      220

```

<210> 2474

<211> 221

<212> PRT

<213> Unknown (3769639-dir-0-8 conceptual translation of range 1-663)

<220>

<221> VARIANT

<222> (1)...(221)

<223> Xaa = Any Amino Acid

<400>2474

```

Gly Asn Phe Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | 5 | | 10 | | 15 | | | | | | | | | |
| Lys | Leu | Leu | Gln | Asn | Met | Gln | Ser | Gln | Val | Pro | Ser | Ile | Ser | Tyr | Ala |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Gly | Cys | Leu | Thr | Gln | Leu | Tyr | Phe | Phe | Met | Val | Phe | Ala | Asp | Met | Glu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ser | Phe | Leu | Leu | Val | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Phe | Pro | Leu | His | Tyr | Thr | Thr | Ile | Met | Ser | Thr | Lys | Val | Cys | Ala | Ser |
| 65 | | | | 70 | | | | | | 75 | | | | | 80 |
| Leu | Leu | Ile | Leu | Leu | Xaa | Met | Leu | Thr | Thr | Ser | His | Ala | Pro | Leu | His |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Thr | Leu | Leu | Met | Ala | Arg | Leu | Pro | Phe | Tyr | Glu | Lys | Asn | Val | Ile | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| His | Phe | Phe | Cys | Asp | Val | Thr | Ala | Leu | Leu | Lys | Leu | Ser | Cys | Ser | Asp |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Thr | Tyr | Val | Asn | Glu | Met | Met | Met | Tyr | Ile | Leu | Gly | Gly | Leu | Ile | Ser |
| | | 130 | | | | 135 | | | | | 140 | | | | |
| Val | Ile | Pro | Phe | Leu | Phe | Ile | Val | Met | Ser | Tyr | Val | Arg | Ile | Phe | Phe |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Ile | Leu | Lys | Phe | Pro | Ser | Ile | Gln | Asp | Ile | His | Lys | Val | Phe | Ser |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Thr | Cys | Gly | Ser | His | Leu | Ser | Val | Val | Thr | Leu | Phe | Tyr | Gly | Thr | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Phe | Gly | Leu | Tyr | Leu | Cys | Pro | Ser | Gly | Asn | Asn | Ser | Thr | Val | Lys | Glu |
| | | 195 | | | | 200 | | | | | | 205 | | | |
| Ile | Ala | Met | Ala | Met | Met | Tyr | Thr | Val | Val | Thr | Pro | Met | | | |
| | | 210 | | | | 215 | | | | | 220 | | | | |

<210> 2475

<211> 312

<212> PRT

<213> Unknown (205843-dir-0-11 conceptual translation of range 1-936)

<400>2475

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Gly | Asn | Asn | Gln | Thr | Leu | Ile | Leu | Glu | Phe | Leu | Leu | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Pro | Ile | Pro | Ser | Glu | Tyr | His | Leu | Leu | Phe | Tyr | Ala | Leu | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ala | Met | Tyr | Leu | Thr | Ile | Ile | Leu | Gly | Asn | Leu | Leu | Ile | Ile | Val | Leu |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Val | Arg | Leu | Asp | Ser | His | Leu | His | Met | Pro | Met | Tyr | Leu | Phe | Leu | Ser |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Phe | Ser | Asp | Leu | Cys | Phe | Ser | Ser | Val | Thr | Met | Pro | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Leu | Gln | Asn | Met | Gln | Ser | Gln | Val | Pro | Ser | Ile | Ser | Tyr | Thr | Gly |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Cys | Leu | Thr | Gln | Leu | Tyr | Phe | Phe | Met | Val | Phe | Gly | Asp | Met | Glu | Ser |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Leu | Leu | Val | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Phe |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Pro | Leu | Arg | Tyr | Thr | Thr | Ile | Met | Ser | Thr | Lys | Phe | Cys | Ala | Ser | Leu |
| | | 130 | | | | 135 | | | | | 140 | | | | |
| Val | Leu | Leu | Leu | Trp | Met | Leu | Thr | Met | Thr | His | Ala | Leu | Leu | His | Thr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Leu | Ile | Ala | Arg | Leu | Ser | Phe | Cys | Glu | Lys | Asn | Val | Ile | Leu | His |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Phe | Phe | Cys | Asp | Ile | Ser | Ala | Leu | Leu | Lys | Leu | Ser | Cys | Ser | Asp | Ile |
| | | 180 | | | | | 185 | | | | | 190 | | | |
| Tyr | Val | Asn | Glu | Leu | Met | Ile | Tyr | Ile | Leu | Gly | Gly | Leu | Ile | Ile | Ile |
| | | 195 | | | | 200 | | | | | | 205 | | | |
| Ile | Pro | Phe | Leu | Leu | Ile | Val | Met | Ser | Tyr | Val | Arg | Ile | Phe | Phe | Ser |

210 215 220
 Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile Tyr Lys Val Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Phe
 245 250 255
 Gly Ile Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile
 260 265 270
 Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val
 290 295 300
 Ile Cys Thr Lys Lys Ile Ser Leu
 305 310

<210> 2476

<211> 216

<212> PRT

<213> Unknown (p198-dir-0-8 conceptual translation of range 2-649)

<400>2476

Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
 1 5 10 15
 Asn Met Gln Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp Cys Leu Thr
 20 25 30
 Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu Leu
 35 40 45
 Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
 50 55 60
 Tyr Thr Ser Ile Met Ser Thr Lys Phe Cys Ala Leu Leu Val Leu Leu
 65 70 75 80
 Leu Trp Met Leu Thr Ile Ser His Ala Leu Leu His Thr Leu Leu Met
 85 90 95
 Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His Phe Phe Cys
 100 105 110
 Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr Tyr Val Asn
 115 120 125
 Glu Leu Met Ile Phe Ile Met Gly Gly Ile Ile Ser Ile Ile Pro Phe
 130 135 140
 Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser Ile Leu Lys
 145 150 155 160
 Val Pro Ser Ser Gln Asp Ile His Lys Val Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
 180 185 190
 Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Asn Glu Ile Ser Met Ala
 195 200 205
 Met Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2477

<211> 236

<212> PRT

<213> Unknown (3810822-dir-0-8 conceptual translation of range 1-708)

<400>2477

Pro Met Tyr Leu Phe Leu Gly Asn Leu Ser Phe Ser Asp Leu Cys Phe
 1 5 10 15
 Ser Ser Val Thr Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp
 20 25 30
 Thr Ser Ile Thr Tyr Val Gly Cys Leu Thr Gln Ser Val Leu Phe Leu
 35 40 45

```

Ile Phe Phe Gly Gly Leu Glu Ile Phe Leu Leu Val Val Met Ala Tyr
 50          55          60
Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Ser Ser Ile Met
65          70          75          80
Ser Leu Lys Phe Cys Val Cys Ala Val Leu Ile Ser Trp Ile Asn Ser
          85          90          95
Pro Trp Tyr Ser Lys Leu His Thr Leu Leu Leu Ala Arg Leu Ser Phe
          100          105          110
Cys Glu Asp Asn Ile Ile Cys His Phe Phe Cys Asp Met Ser Ala Leu
          115          120          125
Leu Lys Leu Ala Cys Ser Asp Ile Tyr Ile Asn Glu Leu Val Ile Phe
          130          135          140
Ile Leu Gly Gly Pro Leu Val Val Ile Pro Phe Leu Leu Ile Val Val
145          150          155          160
Ser Tyr Val Gln Ile Ile Phe Ser Ile Leu Lys Ala Ser Ser Thr Arg
          165          170          175
Gly Ile Tyr Lys Val Phe Ser Thr Cys Gly Thr Tyr Leu Thr Val Val
          180          185          190
Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Phe Cys Pro Ser Glu
          195          200          205
Lys Leu Tyr Ser Lys Glu Ala Ser Ile Thr Met Met Tyr Thr Val Val
          210          215          220
Thr Pro Met His Pro Phe Ile Tyr Thr Leu Arg Asn
225          230          235

```

<210> 2478

<211> 216

<212> PRT

<213> Unknown (OST044-dir-0-8 conceptual translation of range 2-649)

<400>2478

```

Leu Ala Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
 1          5          10          15
Asp Met Arg Thr Lys Tyr Lys Ser Ile Leu Tyr Glu Glu Cys Ile Ser
          20          25          30
Gln Met Tyr Phe Phe Ile Phe Phe Thr Asp Leu Asp Ser Phe Leu Ile
          35          40          45
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
          50          55          60
Tyr Thr Val Ile Met Arg Glu Glu Leu Cys Val Phe Leu Val Ala Val
65          70          75          80
Ser Trp Ile Leu Ser Cys Ala Ser Ser Leu Ser His Thr Leu Leu Leu
          85          90          95
Thr Arg Leu Ser Phe Cys Ala Ala Asn Thr Ile Pro His Val Phe Cys
          100          105          110
Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile Phe Leu Asn
          115          120          125
Glu Leu Val Met Phe Thr Val Gly Val Val Val Ile Thr Leu Pro Phe
          130          135          140
Met Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Ala Thr Ile Leu Arg
145          150          155          160
Val Pro Ser Thr Lys Gly Ile His Lys Ala Leu Ser Thr Cys Gly Ser
          165          170          175
His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ser Ile Phe Gly Gln Tyr
          180          185          190
Leu Phe Pro Thr Val Ser Ser Ser Ile Asp Lys Asp Val Ile Val Ala
          195          200          205
Leu Met Tyr Thr Val Val Thr Pro
          210          215

```

<210> 2479

<211> 216

<212> PRT

<213> Unknown (hg152-dir-0-8 conceptual translation of range 1-648)

<400>2479

```

Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
 1          5          10          15
Asp Met Arg Thr Lys Tyr Lys Ser Ile Leu Tyr Glu Glu Cys Ile Ser
          20          25          30
Gln Met Tyr Phe Phe Ile Phe Phe Thr Asp Leu Asp Ser Phe Leu Ile
          35          40          45
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
          50          55          60
Tyr Thr Val Val Met Arg Glu Glu Leu Cys Val Phe Leu Val Ala Val
          65          70          75          80
Ser Trp Ile Leu Ser Cys Asp Ser Ser Leu Ser His Thr Leu Leu Leu
          85          90          95
Thr Arg Leu Ser Phe Cys Ala Ala Asn Thr Ile Pro His Val Phe Cys
          100          105          110
Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile Phe Leu Asn
          115          120          125
Glu Leu Val Met Phe Thr Val Gly Val Val Val Ile Thr Leu Pro Phe
          130          135          140
Met Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Ala Thr Ile Leu Arg
          145          150          155          160
Val Pro Ser Thr Lys Gly Ile His Lys Ala Leu Ser Thr Cys Gly Ser
          165          170          175
His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ser Ile Phe Gly Gln Tyr
          180          185          190
Leu Phe Pro Thr Val Ser Ser Ser Ile Asp Lys Asp Val Ile Val Ala
          195          200          205
Leu Met Tyr Thr Val Val Thr Pro
          210          215

```

<210> 2480

<211> 112

<212> PRT

<213> Unknown (1142973-dir-0-5 conceptual translation of range 1-336)

<400>2480

```

His Pro Leu His Tyr Ile Thr Ile Met Ser Gln Ser Arg Cys Ala Met
 1          5          10          15
Leu Val Ala Val Ser Trp Val Ile Ala Ser Ala Cys Ala Leu Leu His
          20          25          30
Ser Leu Leu Leu Asp Gln Leu Ser Phe Cys Ala Asp His Thr Val Pro
          35          40          45
His Phe Phe Cys Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp
          50          55          60
Thr Ser Leu Asn Gln Leu Val Ile Phe Thr Ala Gly Leu Ala Ala Ile
          65          70          75          80
Met Leu Pro Phe Leu Cys Ile Leu Ile Ser Tyr Gly Arg Ile Gly Phe
          85          90          95
Thr Ile Leu Gln Val Pro Thr Thr Lys Gly Ile Cys Lys Ala Leu Ser
          100          105          110

```

<210> 2481

<211> 216

<212> PRT

<213> Unknown (hg32-dir-0-8 conceptual translation of range 1-648)

<400>2481

```

Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
 1          5          10          15
Asn Met Gln Thr Gln His Leu Ala Val Phe Tyr Lys Gly Cys Ile Ser
          20          25          30
Gln Thr Tyr Phe Phe Ile Phe Phe Ala Asp Leu Asp Ser Phe Leu Ile
          35          40          45
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
          50          55          60
Tyr Ala Thr Ile Met Thr Gln Ser Gln Cys Val Met Leu Val Ala Gly
65          70          75          80
Ser Trp Val Ile Ala Cys Ala Cys Ala Leu Leu Asp Thr Leu Leu Leu
          85          90          95
Ala Gln Leu Ser Phe Cys Ala Asp His Ile Ile Pro His Tyr Phe Cys
          100          105          110
Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr Ser Leu Asn
          115          120          125
Gln Leu Ala Ile Phe Thr Ala Ala Leu Thr Ala Ile Met Leu Pro Phe
          130          135          140
Leu Cys Ile Leu Val Ser Tyr Gly His Ile Gly Val Thr Ile Leu Gln
          145          150          155          160
Ile Pro Ser Thr Lys Gly Ile Cys Lys Ala Leu Ser Thr Cys Gly Ser
          165          170          175
His Leu Ser Val Val Thr Ile Tyr Tyr Arg Thr Ile Ile Gly Leu Tyr
          180          185          190
Phe Leu Pro Pro Ser Ser Asn Thr Asn Asp Lys Asn Ile Ile Ala Ser
          195          200          205
Val Ile Tyr Thr Ala Val Thr Pro
          210          215

```

<210> 2482

<211> 223

<212> PRT

<213> Unknown (3983375-dir-0-8 conceptual translation of range 1-669)

<400>2482

```

Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro
 1          5          10          15
Lys Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser His Ala
          20          25          30
Gly Cys Val Ser Gln Ile Tyr Phe Phe Leu Leu Phe Gly Cys Ile Asp
          35          40          45
Asn Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
          50          55          60
His Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Val Leu
          65          70          75          80
Leu Val Met Val Ser Trp Ala Phe Ser Ser Ser Asn Gly Leu Val His
          85          90          95
Thr Leu Leu Phe Ala Arg Leu Ser Leu Phe Arg Asp Asn Thr Val His
          100          105          110
His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Ser Asp
          115          120          125
Thr Thr Ile Asn Glu Leu Val Ile Leu Thr Leu Ala Val Val Val Ile
          130          135          140
Thr Val Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Met Gly Ala
          145          150          155          160
Thr Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser
          165          170          175
Thr Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile
          180          185          190
Ile Gly Leu Tyr Phe Phe Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp
          195          200          205

```

Val Ile Val Ala Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn
 210 215 220

<210> 2483

<211> 176

<212> PRT

<213> Unknown (3273636-dir-0-7 conceptual translation of range 4-531)

<400>2483

Gln Ala Leu Ala Tyr Asp Arg Phe Leu Ala Ile Cys Gln Pro Leu His
 1 5 10 15
 Tyr Arg Thr Ile Met Arg Asp Gly Phe Cys Val Leu Leu Val Val Gly
 20 25 30
 Ser Trp Phe Phe Ser Cys Val His Ala Leu Leu His Thr Leu Leu Leu
 35 40 45
 Ser Arg Leu Ser Phe Cys Ala Asp Asn Ala Ile Pro His Phe Phe Cys
 50 55 60
 Asp Phe Thr Ala Val Leu Lys Met Thr Cys Ser Asp Thr Ser Ile Asn
 65 70 75 80
 Glu Leu Val Ile Phe Ile Glu Gly Gly Leu Leu Thr Ser Leu Pro Leu
 85 90 95
 Ser Ala Ile Leu Gly Ser Tyr Val Arg Ile Gly Ala Ser Ile Leu Arg
 100 105 110
 Val Pro Ser Met Lys Arg Ile Cys Lys Ala Leu Ser Thr Cys Gly Ser
 115 120 125
 His Leu Phe Val Val Phe Leu Tyr Tyr Gly Thr Ile Ala Met Thr Tyr
 130 135 140
 Phe Phe Pro Ser Ser Tyr Asn Ser Lys Val Lys Gly Ile Ile Ala Ser
 145 150 155 160
 Val Ile Tyr Thr Val Val Ala Pro Met Leu Asn Pro Phe Ile Cys Ser
 165 170 175

<210> 2484

<211> 222

<212> PRT

<213> Unknown (4877296-dir-0-8 conceptual translation of range 2-667)

<400>2484

Ser His Leu Ala Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Leu Pro
 1 5 10 15
 Lys Met Leu Met Asn Met Gln Thr Arg Cys Gln Ala Ile Thr Tyr Ala
 20 25 30
 Gly Cys Ile Ser Gln Val Tyr Cys Phe Ile Phe Phe Gly Cys Leu Asp
 35 40 45
 Ser Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys
 50 55 60
 His Pro Leu His Tyr Thr Ala Ile Met Arg Asp Glu Leu Cys Val Ile
 65 70 75 80
 Leu Val Ala Gly Arg Trp Leu Ala Ala Cys Ala Gln Ala Leu Leu His
 85 90 95
 Thr Leu Leu Val Asp Gln Leu Thr Leu Cys Ala Gly Thr Val Ile Pro
 100 105 110
 His Phe Phe Cys Asp Leu Ala Val Val Leu Lys Ser Ser Cys Ser Asp
 115 120 125
 Thr Ser Leu Asn Glu Leu Leu Ile Leu Thr Glu Gly Gly Leu Ile Phe
 130 135 140
 Thr Leu Pro Leu Gly Gly Ile Leu Gly Ser Tyr Ile Arg Met Ala Ala
 145 150 155 160
 Ile Ile Leu Lys Val Pro Ser Phe Thr Arg Ile Phe Lys Ala Leu Ser
 165 170 175
 Thr Cys Gly Ser His Leu Phe Val Val Phe Leu Tyr Tyr Gly Thr Ile

```
<210> 2485
<211> 173
<212> PRT
<213> Unknown (3273660-dir-0-7 conceptual translation of range 1-519)
```

```
<210> 2486
<211> 135
<212> PRT
<213> Unknown (3273658-dir-0-6 conceptual translation of range 1-405)
```

<210> 2487

<211> 176

<212> PRT

<213> Unknown (3273646-dir-0-7 conceptual translation of range 1-528)

<400>2487

Gln Ala Leu Ala Tyr Asp Arg Phe Leu Ala Val Cys His Pro Leu His
 1 5 10 15
 Tyr Ala Ile Phe Met Arg Glu Arg Leu Cys Ile Phe Leu Leu Ala Gly
 20 25 30
 Ser Trp Leu Leu Ser Gly Ala Ser Ala Leu Thr His Thr Leu Leu Val
 35 40 45
 Val Gln Leu Ser Phe Cys Ala Asp Asn Ile Ile Leu His Phe Phe Cys
 50 55 60
 Asp Leu Val Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Ser Leu Asn
 65 70 75 80
 Glu Leu Val Ile Phe Thr Val Gly Ser Val Gly Leu Val Phe Pro Leu
 85 90 95
 Ser Gly Ile Leu Val Ser Tyr Gly Arg Ile Gly Leu Ser Ile Leu Arg
 100 105 110
 Val Pro Ser Thr Lys Gly Val Cys Lys Ala Leu Ser Thr Cys Gly Ser
 115 120 125
 His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Met Ala Val Tyr
 130 135 140
 Phe Ser Ser Ser Ser Gly Gln Ser His Glu Lys Asp Ile Ile Ala Ser
 145 150 155 160
 Met Met Tyr Thr Val Val Thr Pro Met Val Asn Pro Val Ile Cys Ser
 165 170 175

<210> 2488

<211> 313

<212> PRT

<213> Unknown (205815-dir-0-11 conceptual translation of range 1-939)

<400>2488

Met Ser Ser Thr Asn Gln Ser Ser Val Thr Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Ser Arg Gln Pro Gln Gln Gln Gln Leu Leu Phe Leu Leu Phe Leu
 20 25 30
 Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala
 35 40 45
 Ile Gly Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys
 65 70 75 80
 Val Leu Ala Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly
 85 90 95
 Cys Leu Thr Gln Leu Tyr Phe Leu Ala Val Phe Gly Asn Met Asp Asn
 100 105 110
 Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His
 115 120 125
 Pro Leu His Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu
 130 135 140
 Val Val Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile
 145 150 155 160
 Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
 165 170 175
 Phe Phe Cys Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
 180 185 190
 His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val
 195 200 205
 Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala

| | | |
|---|-----|-----|
| 210 | 215 | 220 |
| Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr | | |
| 225 | 230 | 235 |
| Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile | | 240 |
| | 245 | 250 |
| Ala Val Tyr Phe Asn Pro Ser Ser Ser His Leu Ala Gly Arg Asp Met | | 255 |
| | 260 | 265 |
| Ala Ala Ala Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe | | 270 |
| | 275 | 280 |
| Ile Tyr Ser Leu Arg Asn Ser Asp Met Lys Ala Ala Leu Arg Lys Val | | 285 |
| | 290 | 295 |
| Leu Ala Met Arg Phe Pro Ser Lys Gln | | 300 |
| 305 | 310 | |

<210> 2489

<211> 216

<212> PRT

<213> Unknown (hg91-dir-0-8 conceptual translation of range 1-648)

<400>2489

| | |
|---|-----|
| Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys Val Leu Ala | |
| 1 | 5 |
| Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly Cys Leu Thr | 10 |
| | 20 |
| Gln Leu Tyr Phe Leu Ala Val Cys Gly Asn Met Asp Asn Phe Leu Leu | 25 |
| | 35 |
| Gly Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His | 40 |
| | 50 |
| Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu Val Val Gly | 55 |
| 65 | 70 |
| Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile Leu Leu Met | 75 |
| | 85 |
| Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His Phe Phe Cys | 90 |
| | 100 |
| Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn | 105 |
| | 115 |
| Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val Thr Pro Phe | 120 |
| | 130 |
| Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala Val Leu Arg | 135 |
| 145 | 150 |
| Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr Cys Gly Ser | 155 |
| | 165 |
| His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile Ala Val Tyr | 170 |
| | 180 |
| Phe Asn Pro Ser Ser Ser His Leu Ala Gly Arg Asp Met Ala Ala Ala | 185 |
| | 195 |
| Val Met Tyr Pro Val Val Thr Pro | 200 |
| | 210 |
| | 215 |

<210> 2490

<211> 157

<212> PRT

<213> Unknown (902718-dir-0-6 conceptual translation of range 2-472)

<400>2490

| | |
|---|----|
| Ile Cys His Pro Leu Gln Tyr Thr Thr Lys Met Thr His Gln Leu Cys | |
| 1 | 5 |
| Ala Leu Leu Val Val Gly Ser Trp Val Val Ala Asn Leu Asn Cys Leu | 10 |
| | 20 |
| Leu His Ile Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ile | 25 |
| | 35 |
| | 40 |
| | 45 |

Ile Pro His Phe Phe Cys Asp Ala Thr Pro Leu Leu Lys Leu Ser Cys
 50 55 60
 Ser Asp Thr His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val
 65 70 75 80
 Ile Ile Val Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Val
 85 90 95
 Thr Cys Ala Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ala
 100 105 110
 Phe Ser Thr Arg Gly Ser His Pro Ala Val Val Cys Leu Phe Tyr Gly
 115 120 125
 Thr Ile Ile Ala Glu Tyr Phe Ser Ser Ser Ser Pro His Ser Ala Gly
 130 135 140
 Arg Asp Met Ala Gly Ala Met Met Tyr Thr Val Val Thr
 145 150 155

<210> 2491

<211> 221

<212> PRT

<213> Unknown (3769625-dir-0-8 conceptual translation of range 1-663)

<400>2491

Ser Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Ala Pro
 1 5 10 15
 Ser Val Leu Ala Asn His Ile Leu Gly Ser Gln Lys Ile Ser Phe Ser
 20 25 30
 Gly Cys Leu Thr Gln Leu Tyr Phe Leu Cys Ile Phe Gly Asp Met Asp
 35 40 45
 Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
 50 55 60
 His Pro Leu Arg Tyr Thr Thr Lys Met Thr His Gln Val Cys Ala Leu
 65 70 75 80
 Leu Val Met Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His
 85 90 95
 Ile Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Ser Ile Ile Pro
 100 105 110
 His Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp
 115 120 125
 Thr His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met
 130 135 140
 Val Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Trp
 145 150 155 160
 Ala Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ala Phe Ser
 165 170 175
 Thr Cys Gly Ser His Leu Thr Val Val Cys Leu Leu Tyr Gly Thr Val
 180 185 190
 Ile Thr Val Tyr Phe Asn Pro Ser Thr Ser Tyr Ser Ala Gly Arg Asp
 195 200 205
 Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Met
 210 215 220

<210> 2492

<211> 221

<212> PRT

<213> Unknown (3769644-dir-0-8 conceptual translation of range 1-663)

<400>2492

Thr Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Ser Thr Val Pro
 1 5 10 15
 Lys Val Leu Ala Asn His Ile Leu Gly Ser Gln Glu Ile Ser Phe Ser
 20 25 30
 Gly Cys Leu Thr Gln Met Tyr Phe Leu Ser Val Phe Ala Asp Met Asp

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys | | |
| 50 | 55 | 60 |
| His Pro Leu His Tyr Thr Glu Lys Met Thr Arg Gln Leu Cys Ala Leu | | |
| 65 | 70 | 75 |
| Leu Val Val Glu Ser Trp Val Ala Ala Asn Leu Asn Ala Leu Leu His | | 80 |
| | 85 | 90 |
| Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Gly Asp Asn Ile Ile Pro | | 95 |
| | 100 | 105 |
| His Phe Phe Cys Asp Ala Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp | | 110 |
| | 115 | 120 |
| Thr His Leu Asn Glu Leu Met Ile Leu Thr Val Ala Gly Leu Ile Leu | | 125 |
| | 130 | 135 |
| Leu Ala Pro Phe Val Cys Ile Leu Met Ser Tyr Ile Leu Ile Ala Cys | | 140 |
| 145 | 150 | 155 |
| Ala Val Val Arg Val Ser Ser Thr Gly Gly Arg Trp Lys Ala Phe Ser | | 160 |
| | 165 | 170 |
| Thr Cys Gly Ser His Leu Thr Val Val Cys Leu Phe Tyr Gly Thr Ile | | 175 |
| | 180 | 185 |
| Ile Ala Val Tyr Phe Asn Pro Ala Ser Ser His Ser Ala Gly Arg Asp | | 190 |
| | 195 | 200 |
| Met Ala Ser Ala Met Met Tyr Thr Val Val Thr Pro Met | | 205 |
| 210 | 215 | 220 |

<210> 2493

<211> 327

<212> PRT

<213> Unknown (2808536-dir-0-11 conceptual translation of range 16-996)

<220>

<221> VARIANT

<222> (1)...(327)

<223> Xaa = Any Amino Acid

<400>2493

| | | |
|---|-----|-----|
| Val Cys Phe Xaa Ile His Cys Leu Leu Cys Ser Trp Val Gln Thr Tyr | | |
| 1 | 5 | 10 |
| Glu Arg Asp Lys Pro Val Ser Val Ser Glu Phe Leu Leu Leu Gly Leu | | 15 |
| | 20 | 25 |
| Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu Ser | | 30 |
| | 35 | 40 |
| Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile | | 45 |
| | 50 | 55 |
| Ser Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn | | 60 |
| 65 | 70 | 75 |
| Met Ser Phe Val Asp Asn Cys Phe Ser Thr Thr Val Pro Lys Met Leu | | 80 |
| | 85 | 90 |
| Ala Asn His Ile Leu Arg Thr Gln Thr Ile Ser Phe Ser Gly Cys Leu | | 95 |
| | 100 | 105 |
| Met Gln Met Tyr Phe Ile Ser Glu Leu Ala Asp Met Asp Asn Phe Leu | | 110 |
| | 115 | 120 |
| Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Arg Pro Leu | | 125 |
| | 130 | 135 |
| His Tyr Thr Ala Lys Met Ile His Gln Leu Cys Ala Leu Leu Val Thr | | 140 |
| 145 | 150 | 155 |
| Gly Ser Trp Val Val Ala Asn Ser Asn Ala Leu Leu His Thr Leu Leu | | 160 |
| | 165 | 170 |
| Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile Pro His Ile Phe | | 175 |
| | 180 | 185 |
| Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu | | 190 |
| 195 | 200 | 205 |

Ser Glu Val Met Ile Leu Thr Glu Ala Ala Leu Val Thr Ile Thr Pro
 210 215 220
 Phe Leu Cys Leu Leu Ala Ser Tyr Met His Ile Thr Cys Val Val Leu
 225 230 235 240
 Arg Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly
 245 250 255
 Ser His Leu Ala Val Val Leu Leu Phe Tyr Gly Thr Ile Met Ser Pro
 260 265 270
 Tyr Phe Arg Thr Ser Ser Ser His Ser Ala Gln Arg Asp Ile Ala Ala
 275 280 285
 Ala Val Arg Phe Thr Val Val Thr Pro Val Met Asn Pro Leu Ile Tyr
 290 295 300
 Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Val Lys Val Val Ala
 305 310 315 320
 Val Lys Phe Phe Ser Val Gln
 325

<210> 2494

<211> 312

<212> PRT

<213> Unknown (2370144-dir-0-11 conceptual translation of range 1-936)

<400>2494

Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu
 20 25 30
 Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
 35 40 45
 Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys
 65 70 75 80
 Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn
 100 105 110
 Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His
 115 120 125
 Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu
 130 135 140
 Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His
 165 170 175
 Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asn Thr
 180 185 190
 His Leu Asn Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile
 195 200 205
 Thr Pro Phe Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr
 210 215 220
 Val Leu Lys Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
 245 250 255
 Ala Val Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr
 260 265 270
 Met Ala Thr Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Tyr Leu Lys Gly Ala Leu Lys Lys Val
 290 295 300

Ile Gly Arg Val Val Phe Ser Val
305 310

<210> 2495

<211> 216

<212> PRT

<213> Unknown (2921659-dir-0-8 conceptual translation of range 2-649)

<400>2495

Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
1 5 10 15
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
20 25 30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
35 40 45
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
50 55 60
Tyr Thr Ala Lys Val Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
65 70 75 80
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
85 90 95
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
100 105 110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
115 120 125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
130 135 140
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
145 150 155 160
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
165 170 175
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
180 185 190
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
195 200 205
Val Leu Tyr Thr Val Val Thr Pro
210 215

<210> 2496

<211> 216

<212> PRT

<213> Unknown (2921657-dir-0-8 conceptual translation of range 2-649)

<400>2496

Phe Val Asp Ile Cys Phe Ser Ser Thr Thr Val Pro Lys Met Leu Ala
1 5 10 15
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
20 25 30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Tyr Phe Leu Leu
35 40 45
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
50 55 60
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
65 70 75 80
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
85 90 95
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
100 105 110
Asp Val Thr Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr His Leu Asn
115 120 125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe

130 135 140
 Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
 145 150 155 160
 Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
 180 185 190
 Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
 195 200 205
 Val Leu Tyr Thr Val Val Thr Pro
 210 215

<210> 2497

<211> 216

<212> PRT

<213> Unknown (2921653-dir-0-8 conceptual translation of range 2-649)

<400>2497

Phe Val Asp Ile Cys Phe Ser Ser Thr Thr Val Pro Lys Met Leu Ala
 1 5 10 15
 Asn His Ile Leu Glu Thr Gln Thr Ile Ser Leu Cys Gly Cys Leu Thr
 20 25 30
 Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
 35 40 45
 Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
 50 55 60
 Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
 65 70 75 80
 Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
 85 90 95
 Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
 100 105 110
 Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
 115 120 125
 Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
 130 135 140
 Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
 145 150 155 160
 Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
 180 185 190
 Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Pro Thr
 195 200 205
 Val Leu Tyr Thr Val Val Thr Pro
 210 215

<210> 2498

<211> 216

<212> PRT

<213> Unknown (2921655-dir-0-8 conceptual translation of range 2-649)

<400>2498

Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
 1 5 10 15
 Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
 20 25 30
 Gln Met Tyr Phe Val Phe Thr Phe Val Asp Met Asp Asn Phe Leu Leu
 35 40 45
 Ala Val Met Ala Tyr Asp His Phe Val Ala Glu Cys His Pro Leu His
 50 55 60

```

Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
65          70          75          80
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
          85          90          95
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
          100          105          110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
          115          120          125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
          130          135          140
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
          145          150          155          160
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
          165          170          175
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
          180          185          190
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
          195          200          205
Val Leu Tyr Thr Val Val Thr Pro
          210          215

```

<210> 2499

<211> 216

<212> PRT

<213> Unknown (2921651-dir-0-8 conceptual translation of range 2-649)

<400>2499

```

Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
1          5          10          15
Asp His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
          20          25          30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
          35          40          45
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
          50          55          60
Tyr Thr Ala Arg Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
65          70          75          80
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
          85          90          95
Ala Pro Leu Ser Phe Tyr Ala Asp Asn Ala Ile Thr His Phe Phe Cys
          100          105          110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
          115          120          125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
          130          135          140
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
          145          150          155          160
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
          165          170          175
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
          180          185          190
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Ile Ala Thr
          195          200          205
Val Leu Tyr Thr Val Val Thr Pro
          210          215

```

<210> 2500

<211> 216

<212> PRT

<213> Unknown (2921692-dir-0-8 conceptual translation of range 2-649)

<400>2500

```

Phe Val Asp Ile Cys Phe Ser Cys Thr Thr Val Pro Lys Met Leu Ala
 1           5           10           15
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
      20           25           30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Thr Asp Asn Phe Leu Leu
      35           40           45
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
      50           55           60
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
      65           70           75           80
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
      85           90           95
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
      100          105          110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
      115          120          125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
      130          135          140
Leu Cys Asn Leu Ala Ser Tyr Met His Ile Thr Cys Thr Gly Leu Lys
      145          150          155          160
Gly Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
      165          170          175
His Leu Ala Val Gly Leu Leu Phe Tyr Ser Thr Ile Thr Ala Val Tyr
      180          185          190
Phe Asn Pro Leu Ser Ser His Ser Ala Ala Lys Asp Thr Met Ala Thr
      195          200          205
Val Leu Tyr Thr Val Val Thr Pro
      210          215

```

<210> 2501

<211> 224

<212> PRT

<213> Unknown (4877342-dir-0-8 conceptual translation of range 2-673)

<220>

<221> VARIANT

<222> (1)...(224)

<223> Xaa = Any Amino Acid

<400>2501

```

Cys Asn Leu Ser Phe Gly Asp Ile Cys Phe Ser Ser Thr Thr Val Pro
 1           5           10           15
Lys Met Leu Ala Asn His Ile Leu Arg Lys Gln Thr Ile Pro Phe Ser
      20           25           30
Arg Cys Leu Ala Gln Met Tyr Phe Val Phe Thr Phe Met Asp Met Asp
      35           40           45
Asn Phe Leu Leu Ala Met Met Ala Tyr Asp His Phe Val Ala Val Cys
      50           55           60
His Pro Leu His Tyr Tyr Ala Lys Met Thr His Gln Leu Cys Ala Leu
      65           70           75           80
Leu Val Thr Gly Ser Trp Val Ile Ala Asn Leu Asp Met Leu Leu His
      85           90           95
Thr Leu Leu Met Ala Xaa Leu Ser Phe Cys Ala Asp Asn Ala Ile Pro
      100          105          110
His Phe Phe Cys Asp Val Thr Thr Leu Leu Lys Leu Ser Cys Ser Asp
      115          120          125
Thr His Leu Ser Glu Val Met Ile Leu Thr Glu Ala Arg Pro Val Met
      130          135          140
Ser Thr Pro Phe Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Asn Cys
      145          150          155          160

```

Ala Val Leu Arg Val Gln Ser Thr Lys Gly Arg Trp Lys Thr Phe Ser
 165 170 175
 Thr Cys Gly Ser His Leu Ala Met Val Phe Leu Phe Tyr Gly Thr Met
 180 185 190
 Ile Phe Leu Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Ile Asp
 195 200 205
 Ile Ala Ala Ala Ala Met Arg Cys Leu Tyr Met Val Thr Pro Met Leu
 210 215 220

<210> 2502

<211> 216

<212> PRT

<213> Unknown (p105-dir-0-8 conceptual translation of range 2-649)

<400>2502

Leu Val Asp Phe Cys Phe Thr Ser Ala Thr Val Pro Lys Met Leu Leu
 1 5 10 15
 Asn Ile His Arg Gln Ile Gln Ser Ile Ser His Glu Gly Cys Leu Thr
 20 25 30
 Gln Ile Tyr Phe Cys Ile Leu Leu Ala Asn Met Asp Asn Phe Leu Leu
 35 40 45
 Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu Gln
 50 55 60
 Tyr Thr Thr Ile Met Ser Leu Gln Leu Cys Cys Leu Met Leu Ala Gly
 65 70 75 80
 Ser Trp Leu Ile Ala Asn Phe His Ser Leu Leu His Thr Leu Leu Met
 85 90 95
 Ala Arg Leu Asp Phe Cys Ala Lys Asn Val Met Pro Tyr Phe Phe Cys
 100 105 110
 Asp Leu Val Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu Asn
 115 120 125
 Gln Leu Met Ile Leu Leu Val Gly Gly Leu Ile Val Leu Ile Pro Phe
 130 135 140
 Leu Cys Ile Leu Ile Ser Tyr Thr His Ile Val Ser Val Val Leu Lys
 145 150 155 160
 Val Pro Ser Ala Leu Gly Lys Gln Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Ile Leu Phe Tyr Gly Thr Ile Thr Gly Val Tyr
 180 185 190
 Leu Asn Pro Ser Ser Ser His Ser Ala Glu Lys Asp Ser Val Ala Ser
 195 200 205
 Val Met Tyr Met Val Val Thr Pro
 210 215

<210> 2503

<211> 216

<212> PRT

<213> Unknown (p110-dir-0-8 conceptual translation of range 2-649)

<400>2503

Phe Val Asp Leu Cys Gln Ala Ser Thr Thr Met Pro Lys Met Leu Ile
 1 5 10 15
 Asn Ile Leu Thr His Ser Lys Ala Ile Pro Tyr Ala Gly Cys Leu Ile
 20 25 30
 Gln Met Tyr Ser Phe His Leu Phe Gly Thr Met Asp Ser Phe Leu Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Arg
 50 55 60
 Tyr Ala Thr Ile Met Ser Pro Arg Leu Cys Ile Leu Leu Val Gly Gly
 65 70 75 80
 Pro Trp Gly Thr Thr Asn Leu Gln Ser Val Val His Thr Ser Leu Met


```
<210> 2504
<211> 216
<212> PRT
<213> Unknown (p94-dir-0-8 conceptual translation of range 2-649)
```

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Val | Asp | Leu | Cys | Gln | Ala | Ser | Thr | Met | Pro | Lys | Met | Leu | Ile |
| 1 | | | | 5 | | | | | 10 | | | | 15 | |
| Asn | Ile | Leu | Thr | His | Ser | Lys | Ala | Ile | Pro | Tyr | Ala | Gly | Cys | Leu |
| | | 20 | | | | | | 25 | | | | 30 | | Ile |
| Gln | Met | Tyr | Ser | Phe | His | Leu | Phe | Gly | Thr | Met | Asp | Ser | Phe | Leu |
| | | 35 | | | | | 40 | | | | 45 | | | Leu |
| Ala | Val | Met | Ala | Tyr | Asp | Arg | Phe | Val | Ala | Ile | Phe | His | Pro | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | Arg |
| Tyr | Ala | Thr | Ile | Met | Ser | Pro | Arg | Leu | Cys | Ile | Leu | Leu | Val | Gly |
| 65 | | | | | 70 | | | | 75 | | | | | 80 |
| Pro | Trp | Gly | Thr | Thr | Asn | Leu | Gln | Ser | Val | Val | His | Thr | Ser | Leu |
| | | | 85 | | | | | 90 | | | | | 95 | Met |
| Ala | Lys | Leu | Thr | Phe | Cys | Ala | Asp | Asn | Lys | Ile | Pro | His | Phe | Cys |
| | | 100 | | | | | | 105 | | | | | 110 | |
| Asp | Leu | Met | Pro | Leu | Leu | Lys | Leu | Ser | Cys | Ser | Asp | Thr | His | Ile |
| | | 115 | | | | | 120 | | | | 125 | | | Asn |
| Glu | Leu | Val | Val | Leu | Val | Phe | Gly | Ile | Phe | Met | Gly | Ile | Ser | Pro |
| | 130 | | | | | 135 | | | | | 140 | | | Leu |
| Val | Cys | Ile | Leu | Leu | Ser | Tyr | Ile | Cys | Ile | Phe | Cys | Ala | Val | Gln |
| 145 | | | | | 150 | | | | | 155 | | | | 160 |
| Val | Pro | Ser | Ala | Glu | Gly | Lys | Arg | Lys | Ala | Phe | Ser | Thr | Cys | Gly |
| | | | 165 | | | | | 170 | | | | | 175 | Ser |
| His | Leu | Thr | Val | Val | Leu | Val | Phe | Tyr | Gly | Thr | Ile | Phe | Ala | Val |
| | | 180 | | | | | | 185 | | | | 190 | | Tyr |
| Val | Gln | Pro | Ser | Gly | Pro | Thr | Ser | Pro | Glu | Lys | Asp | Lys | Ala | Ala |
| | | 195 | | | | | 200 | | | | | 205 | | Ala |
| Val | Met | Cys | Ala | Val | Val | Ile | Pro | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | |

```
<210> 2505
<211> 169
<212> PRT
<213> Unknown (4877330-dir-0-7 conceptual translation of range 3-509)
```

Asn Leu Ser Leu Val Asp Val Phe Leu Ser Ser Thr Thr Val Pro Lys
1 5 10 15

Met Leu Val Asn Leu Trp Thr Gln Pro Ser His Pro Ser Val Cys Leu
 20 25 30
 Ala Gln Met His Ala Phe His Leu Phe Gly Thr Ile Asp Ser Phe Leu
 35 40 45
 Leu Ala Val Met Ala Ile Asp Arg Phe Met Ala Ile Val His Arg Leu
 50 55 60
 Cys Tyr Leu Ala Ile Met Ser Pro Arg Val Trp Gly Leu Leu Val Gly
 65 70 75 80
 Glu Pro Trp Gln Ile Thr Asn Leu Gln Ser Leu Val His Thr Cys Leu
 85 90 95
 Met Ala Gln Leu Thr Phe Cys Ala Gly Ser Glu Ile Pro His Phe Phe
 100 105 110
 Cys Asp Leu Ile Pro Leu Pro Lys Leu Ser Ser Ser Asp Thr His Thr
 115 120 125
 Asn Glu Pro Val Ile Phe Pro Phe Gly Ile Ile Leu Gly Ile Ser Ser
 130 135 140
 Leu Ala Cys Ile Leu Phe Ser Tyr Thr Ser Ile Phe Gln Ala Val Phe
 145 150 155 160
 Lys Ile Leu Ser Ala Gln Val Lys Trp
 165

<210> 2506

<211> 315

<212> PRT

<213> Unknown (3184261-dir-59-13 conceptual translation of range 6034-6978)

<400>2506

Met Glu Pro Glu Lys Gln Thr Glu Ile Ser Glu Phe Phe Leu Gln Gly
 1 5 10 15
 Leu Ser Glu Lys Pro Glu His Gln Thr Leu Leu Phe Thr Met Phe Leu
 20 25 30
 Ser Thr Tyr Leu Val Thr Ile Ile Gly Asn Ala Leu Ile Ile Leu Ala
 35 40 45
 Ile Ile Thr Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
 50 55 60
 Asn Leu Ser Leu Val Asp Thr Leu Leu Ser Ser Thr Thr Val Pro Lys
 65 70 75 80
 Met Leu Ala Asn Ile Gln Ala Gln Ser Arg Ala Ile Pro Phe Val Gly
 85 90 95
 Cys Leu Thr Gln Met Tyr Ala Phe His Leu Phe Gly Thr Met Asp Ser
 100 105 110
 Phe Leu Leu Ala Val Met Ala Ile Asp Arg Phe Val Ala Ile Val His
 115 120 125
 Pro Gln Arg Tyr Leu Val Leu Met Cys Ser Pro Val Cys Gly Leu Leu
 130 135 140
 Leu Gly Ala Ser Trp Met Ile Thr Asn Leu Gln Ser Leu Ile His Thr
 145 150 155 160
 Cys Leu Met Ala Gln Leu Thr Phe Cys Ala Gly Ser Glu Ile Ser His
 165 170 175
 Phe Phe Cys Asp Leu Met Pro Leu Leu Lys Leu Ser Gly Ser Asp Thr
 180 185 190
 His Thr Asn Glu Leu Val Ile Phe Ala Phe Gly Ile Val Val Gly Thr
 195 200 205
 Ser Pro Phe Ser Cys Ile Leu Leu Ser Tyr Ile Arg Ile Phe Trp Thr
 210 215 220
 Val Phe Lys Ile Pro Ser Thr Arg Gly Lys Trp Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Leu His Leu Thr Val Val Ser Leu Ser Tyr Gly Thr Ile Phe
 245 250 255
 Ala Val Tyr Leu Gln Pro Thr Ser Pro Ser Ser Ser Gln Lys Asp Lys
 260 265 270

Ala Ala Ala Leu Met Cys Gly Val Phe Ile Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Ile Arg Asn Lys Asp Met Lys Ala Ala Leu Gly Lys Leu
 290 295 300
 Ile Gly Lys Val Ala Val Pro Cys Pro Arg Pro
 305 310 315

<210> 2507

<211> 216

<212> PRT

<213> Unknown (p97-dir-0-8 conceptual translation of range 2-649)

<400>2507

Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro Lys Met Leu Ala
 1 5 10 15
 Asn His Val Ser Gly Asn Lys Ala Ile Pro Tyr Ala Gly Cys Arg Thr
 20 25 30
 Gln Val Phe Phe Phe Ile Trp Phe Pro Gly Val Asp Ser Ile Leu Leu
 35 40 45
 Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
 50 55 60
 Tyr Ser Met Ile Met Thr Pro Lys Val Cys Ala Phe Leu Ile Val Val
 65 70 75 80
 Ser Trp Phe Gly Ala Tyr Ala Ile Ala Leu Ile His Thr Val Leu Leu
 85 90 95
 Thr His Leu Ser Phe Cys Gly His Ser Glu Ile Pro His Phe Phe Cys
 100 105 110
 Asp Leu Ser Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
 115 120 125
 Asn Leu Met Val Asn Thr Val Gly Ala Leu Thr Ile Ile Ile Pro Phe
 130 135 140
 Ile Gly Ile Leu Ile Ser Tyr Thr Gln Ile Phe Met Thr Val Leu Arg
 145 150 155 160
 Ile Pro Ser Thr Val Gly Lys Trp Lys Ala Phe Ser Thr Cys Ser Ser
 165 170 175
 His Ile Thr Val Val Ser Leu Phe Tyr Gly Thr Leu Ile Gly Val Tyr
 180 185 190
 Phe Ser Pro Thr Thr Thr His Thr Ala Gln Gln Asp Thr Ala Ala Ala
 195 200 205
 Ala Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2508

<211> 216

<212> PRT

<213> Unknown (p99-dir-0-8 conceptual translation of range 2-649)

<400>2508

Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Ala
 1 5 10 15
 Asn His Val Ser Gly Asn Lys Met Ile Pro Tyr Pro Gly Cys Leu Thr
 20 25 30
 Gln Val Phe Phe Phe Ile Trp Phe Ala Gly Ile Asp Ser Phe Leu Leu
 35 40 45
 Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
 50 55 60
 Tyr Ser Thr Val Met Thr Leu Arg Val Cys Val Leu Leu Leu Met Val
 65 70 75 80
 Ser Trp Phe Ser Ala Phe Ile Asn Ala Leu Thr His Ala Ala Leu Leu
 85 90 95
 Thr Pro Leu Ser Phe Cys Gly His Asn Glu Ile Pro His Phe Phe Cys

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 100 | | 105 | | 110 | | | | | | | | | | |
| Asp | Leu | Ser | Pro | Leu | Leu | Lys | Leu | Ala | Cys | Ser | Asp | Thr | Phe | Ile | Asn |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Asp | Leu | Met | Val | Tyr | Thr | Val | Gly | Ala | Leu | Pro | Ile | Ile | Thr | Pro | Phe |
| | 130 | | | | | | 135 | | | | | 140 | | | |
| Ile | Gly | Ile | Leu | Ile | Ser | Tyr | Thr | Arg | Ile | Phe | Met | Ala | Val | Leu | Arg |
| 145 | | | | | | 150 | | | | 155 | | | | | 160 |
| Val | Pro | Ser | Ala | Gly | Gly | Lys | Trp | Lys | Ala | Phe | Ser | Thr | Cys | Gly | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| His | Leu | Ala | Val | Val | Ser | Leu | Phe | Tyr | Gly | Thr | Leu | Ile | Gly | Val | Tyr |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Phe | Ser | Pro | Thr | Ser | Thr | Arg | Thr | Ala | Gln | Glu | Asp | Thr | Val | Ala | Ala |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Val | Met | Tyr | Thr | Val | Val | Thr | Pro | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 2509

<211> 216

<212> PRT

<213> Unknown (p96-dir-0-8 conceptual translation of range 2-649)

<400>2509

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Asp | Leu | Cys | Phe | Thr | Ser | Thr | Thr | Val | Pro | Lys | Met | Leu | Asn |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Tyr | Ile | Ser | Gln | Asn | Arg | Thr | Ile | Ser | Tyr | Ala | Gly | Cys | Leu | Thr |
| | | | 20 | | | | 25 | | | | | 30 | | | |
| Gln | Val | Phe | Phe | Phe | Leu | Trp | Phe | Ala | Gly | Met | Asp | Ser | Val | Leu | Leu |
| | | 35 | | | | 40 | | | | | 45 | | | | |
| Thr | Thr | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Ala | Ser | Leu | His |
| | 50 | | | | 55 | | | | | 60 | | | | | |
| Tyr | Ser | Thr | Val | Met | Thr | Pro | Lys | Ile | Cys | Ala | Leu | Leu | Val | Gly | Val |
| 65 | | | | 70 | | | | 75 | | | | | | 80 | |
| Ser | Trp | Phe | Trp | Ala | Tyr | Asn | Asn | Ala | Leu | Ile | His | Thr | Val | Leu | Leu |
| | | | 85 | | | | 90 | | | | | | 95 | | |
| Thr | Arg | Leu | Ser | Phe | Cys | Gly | His | Asn | Glu | Ile | Pro | His | Phe | Phe | Cys |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Asp | Leu | Ser | Pro | Leu | Leu | Lys | Leu | Ala | Cys | Ser | Asp | Thr | Phe | Ile | Asn |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Asp | Leu | Met | Ile | Tyr | Thr | Val | Gly | Ala | Leu | Thr | Ile | Ile | Leu | Pro | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ile | Gly | Ile | Met | Ile | Ser | Tyr | Val | His | Ile | Phe | Met | Ala | Val | Leu | Lys |
| 145 | | | | 150 | | | | | 155 | | | | | 160 | |
| Ile | Ser | Ser | Val | Ser | Gly | Lys | Gln | Lys | Val | Phe | Ser | Thr | Cys | Gly | Ser |
| | | | 165 | | | | 170 | | | | | | 175 | | |
| His | Leu | Thr | Val | Val | Cys | Leu | Phe | Tyr | Gly | Thr | Ile | Ile | Gly | Val | Tyr |
| | | 180 | | | | | 185 | | | | | 190 | | | |
| Phe | Ser | Pro | Thr | Ser | Thr | His | Thr | Ala | Gln | Gln | Asp | Thr | Ala | Ala | Thr |
| | | 195 | | | | 200 | | | | | 205 | | | | |
| Val | Met | Tyr | Thr | Val | Val | Thr | Pro | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 2510

<211> 216

<212> PRT

<213> Unknown (p92-dir-0-8 conceptual translation of range 2-649)

<400>2510

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Phe | Asp | Ile | Cys | Phe | Thr | Ser | Thr | Thr | Ile | Pro | Lys | Met | Leu | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | His | Ile | Ser | Lys | Asn | Lys | Val | Ile | Pro | Tyr | Ser | Met | Cys | Leu | Thr |
| | | | 20 | | | | 25 | | | | | 30 | | | |

Gln Thr Phe Phe Phe Ser Trp Phe Ile Gly Thr Asp Gly Val Leu Leu
 35 40 45
 Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
 50 55 60
 Cys Thr Met Ile Ile Thr Pro Arg Val Cys Val Phe Leu Val Ala Val
 65 70 75 80
 Ser Trp Ile Trp Thr Cys Val Asn Ser Leu Ile His Thr Thr Ser Leu
 85 90 95
 Asn Arg Leu Ser Phe Cys Gly His Asn Glu Ile His His Phe Phe Cys
 100 105 110
 Asp Leu Ser Ala Leu Ile Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
 115 120 125
 Asp Leu Leu Ile Tyr Thr Val Gly Gly Leu Lys Ala Ile Val Pro Phe
 130 135 140
 Ile Gly Ile Leu Leu Ser Tyr Ile His Ile Phe Val Ala Val Leu Arg
 145 150 155 160
 Ile Pro Ser Ala Gly Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Cys Leu Phe Tyr Gly Thr Ile Ile Gly Val Tyr
 180 185 190
 Phe Ser Pro Thr Ser Thr His Thr Ala Gln Lys Asp Thr Ala Val Ala
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2511

<211> 216

<212> PRT

<213> Unknown (p95-dir-0-8 conceptual translation of range 2-649)

<220>

<221> VARIANT

<222> (1)...(216)

<223> Xaa = Any Amino Acid

<400>2511

Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro Lys Thr Leu Val
 1 5 10 15
 Asn Tyr Val Ser Gly Asn Lys Ala Ile Leu Tyr Ile Ser Cys Leu Ala
 20 25 30
 Gln Val Phe Phe Phe Ser Trp Phe Ala Gly Leu Asp Ser Ile Leu Leu
 35 40 45
 Ala Ser Met Ala Tyr Asp Arg Xaa Ile Ala Ile Cys Asp Pro Leu His
 50 55 60
 Tyr Thr Thr Val Met Thr Pro Arg Val Cys Val Leu Leu Val Ala Met
 65 70 75 80
 Cys Leu Phe Gly Gly Cys Ala Asn Ser Leu Thr His Asn Ile Leu Leu
 85 90 95
 Thr Gln Leu Ser Phe Cys Gly His Thr Glu Ile Pro Leu Phe Phe Cys
 100 105 110
 Asp Leu Asn Val Val Ile Arg Leu Ala Cys Ser Asp Thr Phe Ile Asn
 115 120 125
 Asp Trp Met Ile Tyr Thr Met Gly Gly Leu Thr Ala Ile Ile Pro Phe
 130 135 140
 Ser Gly Ile Leu Ile Ser Tyr Ile His Ile Phe Val Ala Met Leu Arg
 145 150 155 160
 Ile Leu Ser Ala Gln Gly Lys Trp Lys Val Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Ile Ala Val Tyr Leu Leu Asn Gly Thr Ile Ile Gly Val Tyr
 180 185 190
 Leu Asn Pro Thr Ser Ser His Thr Ala Gln Gln Asp Thr Ala Ser Ala

195 200 205
Val Met Tyr Thr Met Val Thr Pro
210 215

<210> 2512

<211> 216

<212> PRT

<213> Unknown (p125-dir-0-8 conceptual translation of range 2-649)

<400>2512

Phe Val Asp Leu Cys Phe Thr Thr Thr Thr Val Pro Lys Met Leu Val
1 5 10 15
Asn His Ile Ser Gly Asn Lys Thr Ile Pro Tyr Ala Gly Cys Leu Thr
20 25 30
Gln Met Phe Phe Phe Ile Trp Phe Ala Ser Ile Asp Ser Phe Leu Leu
35 40 45
Val Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His Pro Leu Arg
50 55 60
Tyr Ala Ser Leu Met Ile Pro Arg Leu Cys Ala Leu Leu Val Ala Thr
65 70 75 80
Ser Trp Ser Phe Ala Cys Ile Asn Ala Leu Thr His Thr Val Leu Leu
85 90 95
Thr Gln Leu Ser Phe Cys Ser His Asn Glu Ile Pro His Phe Phe Cys
100 105 110
Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Phe Ile Asn
115 120 125
Asp Val Leu Val Tyr Thr Val Gly Ala Leu Pro Ile Leu Met Pro Phe
130 135 140
Val Gly Ile Leu Val Ser Tyr Thr Arg Ile Phe Ala Ala Val Leu Arg
145 150 155 160
Ile Pro Ser Ala Arg Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser
165 170 175
His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Val Ile Gly Val Tyr
180 185 190
Leu Ser Pro Met Ser Tyr His Thr Val Glu Lys Asp Thr Ala Ala Ala
195 200 205
Val Met Tyr Thr Val Val Thr Pro
210 215

<210> 2513

<211> 216

<212> PRT

<213> Unknown (p123-dir-0-8 conceptual translation of range 2-649)

<400>2513

Phe Val Asp Leu Cys Leu Thr Thr Thr Thr Val Pro Lys Met Leu Leu
1 5 10 15
Asn Ile Gln Thr Gln Lys Lys Thr Ile Ser Tyr Ala Gly Cys Leu Thr
20 25 30
Gln Met Tyr Phe Phe Leu Leu Leu Asp Leu Asp Asn Met Ile Leu
35 40 45
Ala Val Met Ala Phe Asp Arg Tyr Met Ala Ile Cys His Pro Leu His
50 55 60
Tyr Thr Ser Val Met Leu Pro Ser Leu Cys Gly Leu Leu Met Ala Val
65 70 75 80
Leu Trp Val Val Ala Asn Leu Phe Ser Leu Leu Phe Thr Leu Leu Met
85 90 95
Ala Gln Leu Ser Phe Cys Gly Asn Asn Thr Ile Pro His Phe Phe Cys
100 105 110
Asp Leu Ser Val Leu Leu Lys Leu Ser Cys Ser Asp Thr His Ile Val
115 120 125

Glu Asn Leu Leu Leu Ile Val Ser Gly Leu Leu Gly Val Thr Pro Leu
 130 135 140
 Ile Cys Ile Leu Val Ser Tyr Ser Arg Ile Val Ala Thr Val Met Arg
 145 150 155 160
 Ile Pro Ser Ala Lys Gly Lys Arg Lys Thr Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Ala Leu Phe Tyr Cys Ala Gly Phe Gly Val Phe
 180 185 190
 Phe Thr Pro Pro Ser Ser His Ser Gly Gly Lys Asp Thr Ala Ala Ser
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2514

<211> 222

<212> PRT

<213> Unknown (3983377-dir-0-8 conceptual translation of range 1-666)

<400>2514

Ala Asn Leu Ser Ser Val Asp Ile Ser Ala Pro Ser Val Ile Val Pro
 1 5 10 15
 Lys Ala Leu Val Asn His Met Leu Gly Ser Lys Ser Ile Ser Tyr Thr
 20 25 30
 Gly Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Asn Asn Met Asp
 35 40 45
 Gly Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
 50 55 60
 His Pro Leu His Tyr Thr Met Met Met Arg Pro Arg Leu Cys Val Leu
 65 70 75 80
 Leu Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His
 85 90 95
 Thr Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His
 100 105 110
 His Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp
 115 120 125
 Thr Phe Ile Asn Asp Leu Met Val Phe Thr Ile Gly Gly Leu Val Phe
 130 135 140
 Met Thr Pro Phe Thr Cys Ile Ile Val Ser Tyr Ala Tyr Ile Phe Ser
 145 150 155 160
 Lys Val Leu Lys Leu Lys Ser Ala His Gly Ile Arg Lys Ala Leu Ser
 165 170 175
 Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile
 180 185 190
 Leu Gly Ile Tyr Met His Pro Ser Ser Thr Tyr Thr Val Gln Asp Thr
 195 200 205
 Val Ala Thr Val Ile Phe Thr Val Val Thr Pro Met Val Asn
 210 215 220

<210> 2515

<211> 156

<212> PRT

<213> Unknown (902714-dir-0-6 conceptual translation of range 2-469)

<400>2515

Ile Cys His Pro Leu His Tyr Thr Val Met Met Arg Pro Arg Leu Cys
 1 5 10 15
 Val Leu Leu Val Ala Val Ser Trp Val Ile Thr Asn Leu His Ala Leu
 20 25 30
 Leu His Thr Leu Leu Met Val Gln Leu Thr Phe Cys Ser His Asn Ala
 35 40 45
 Val His His Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys

```

      50              55              60
Ser Asp Thr Phe Ile Asn Asp Ile Thr Ala Phe Thr Val Gly Gly Leu
65              70              75              80
Thr Ser Ile Thr Pro Phe Thr Cys Ile Thr Val Ser Tyr Ala Tyr Ile
      85              90              95
Leu Ser Ser Val Leu Lys Phe Pro Ser Ile Gln Gly Ile Arg Lys Ala
      100              105              110
Leu Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly
      115              120              125
Ala Ile Leu Gly Val Tyr Met His Pro Ser Ser Thr Tyr Ser Leu Gln
      130              135              140
Asp Thr Val Ala Thr Ala Phe Phe Thr Val Val Thr
145              150              155

```

<210> 2516

<211> 216

<212> PRT

<213> Unknown (OST034-dir-0-8 conceptual translation of range 2-649)

<400>2516

```

Phe Ala Asp Ile Ser Ser Ile Ser Asn Ser Val Pro Lys Met Leu Val
1      5      10      15
Asn Ile Gln Thr Lys Ser Gln Ser Ile Ser Tyr Glu Ser Cys Ile Thr
      20      25      30
Gln Met Tyr Phe Ser Ile Val Phe Val Val Ile Asp Asn Leu Leu Leu
      35      40      45
Gly Thr Met Ala Tyr Asp His Phe Val Ala Ile Cys His Pro Leu Asn
      50      55      60
Tyr Thr Ile Leu Met Arg Pro Arg Phe Gly Ile Leu Leu Thr Val Ile
65      70      75      80
Ser Trp Phe Leu Ser Asn Ile Ile Ala Leu Thr His Thr Leu Leu Leu
      85      90      95
Ile Gln Leu Leu Phe Cys Asn His Asn Thr Leu Pro His Phe Phe Cys
      100      105      110
Asp Leu Ala Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Leu Ile Asn
      115      120      125
Glu Leu Val Leu Phe Ile Val Gly Leu Ser Val Ile Ile Phe Pro Phe
      130      135      140
Thr Leu Ser Phe Phe Ser Tyr Val Cys Ile Ile Arg Ala Val Leu Arg
145      150      155      160
Val Ser Ser Thr Gln Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
      165      170      175
His Leu Thr Val Val Leu Leu Phe Tyr Gly Thr Ile Val Gly Val Tyr
      180      185      190
Phe Phe Pro Ser Ser Thr His Pro Glu Asp Thr Asp Lys Ile Gly Ala
      195      200      205
Val Leu Phe Thr Val Val Thr Pro
210      215

```

<210> 2517

<211> 323

<212> PRT

<213> Unknown (p156-dir-0-12 conceptual translation of range 34-1003)

<400>2517

```

Ser Glu Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu
1      5      10      15
Leu Trp Gly Leu Ser Asp Gln Pro Gln Gln His Ile Phe Phe Leu
      20      25      30
Leu Phe Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile
      35      40      45

```


Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Ala Ser Leu Ser Cys Ala Asp Ile Phe Phe Thr Ser Thr Thr
 65 70 75 80
 Val Pro Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser
 85 90 95
 Tyr Ala Gly Cys Leu Ala Gln Leu Tyr Phe Phe Gly Thr Ala Leu Leu
 100 105 110
 Leu Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala Thr Met Ala
 115 120 125
 Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Met Met Ile
 130 135 140
 Met Ser Leu His Arg Cys Ala Leu Leu Val Thr Ala Cys Trp Thr Leu
 145 150 155 160
 Thr Ser Leu Val Ala Met Thr His Thr Phe Leu Ile Phe Arg Leu Ser
 165 170 175
 Phe Cys Ser Lys Ile Leu Pro Asp Phe Phe Cys Asp Leu Gly Pro Leu
 180 185 190
 Met Lys Val Ser Cys Ser Asp Ala Gln Val Asn Glu Leu Val Leu Leu
 195 200 205
 Phe Leu Gly Gly Ala Val Ile Leu Ile Pro Phe Met Leu Ile Leu Val
 210 215 220
 Ser Tyr Ile Arg Ile Val Ser Ala Ile Leu Arg Ala Pro Ser Ala Gln
 225 230 235 240
 Gly Arg Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val Val Val
 245 250 255
 Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu Cys Pro Ser Ser
 260 265 270
 Ser Ser Ser Asn Ser Val Lys Glu Asp Thr Val Ala Ala Val Met Tyr
 275 280 285
 Thr Val Val Thr Pro Leu Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn
 290 295 300
 Lys Asp Met Lys Ala Ala Val Val Arg Leu Leu Lys Gly Arg Val Ser
 305 310 315 320
 Leu Ser Gln

<210> 2518

<211> 320

<212> PRT

<213> Unknown (p38-dir-0-11 conceptual translation of range 34-993)

<400>2518

Ser Asp Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu
 1 5 10 15
 Leu Ser Gly Leu Ser Asp Gln Pro Gln Gln Gln His Ile Leu Phe Leu
 20 25 30
 Leu Phe Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile
 35 40 45
 Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Ala Ser Leu Ser Cys Ala Asp Ile Phe Phe Thr Ser Thr Thr
 65 70 75 80
 Val Pro Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser
 85 90 95
 Tyr Ala Gly Cys Leu Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp
 100 105 110
 Met Asp Ile Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Met Ala
 115 120 125
 Ile Cys His Pro Leu His Tyr Met Met Ile Met Ser Leu His Arg Cys
 130 135 140

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Leu | Leu | Val | Thr | Ala | Cys | Trp | Thr | Leu | Thr | Ser | Leu | Val | Ala | Met |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Thr | His | Thr | Phe | Leu | Ile | Phe | Arg | Leu | Ser | Phe | Cys | Ser | Lys | Ile | Ile |
| | | | | 165 | | | | | 170 | | | | | | 175 |
| Pro | Asp | Phe | Phe | Cys | Asp | Leu | Gly | Pro | Leu | Met | Lys | Val | Ser | Cys | Ser |
| | | | | 180 | | | | 185 | | | | | 190 | | |
| Asp | Thr | Gln | Val | Ser | Glu | Leu | Val | Leu | Leu | Phe | Leu | Gly | Gly | Ala | Val |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ile | Leu | Ile | Pro | Phe | Met | Leu | Ile | Leu | Val | Ser | Tyr | Ile | Arg | Ile | Val |
| | 210 | | | | | 215 | | | | 220 | | | | | |
| Ser | Ala | Ile | Leu | Arg | Ala | Pro | Ser | Ala | Gln | Gly | Arg | Arg | Lys | Ala | Phe |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Ser | Thr | Cys | Gly | Ser | His | Leu | Val | Val | Val | Ala | Leu | Phe | Phe | Gly | Thr |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Val | Ile | Arg | Ala | Tyr | Leu | Cys | Pro | Ser | Ser | Ser | Ser | Ser | Asn | Ser | Val |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Asp | Glu | Asp | Thr | Ala | Ala | Ala | Val | Met | Tyr | Thr | Val | Val | Thr | Pro | Leu |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Leu | Asn | Pro | Phe | Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Met | Lys | Ala | Ala |
| | 290 | | | | | 295 | | | | 300 | | | | | |
| Val | Val | Arg | Leu | Leu | Lys | Gly | Arg | Val | Ser | Phe | Ser | Gln | Gly | Gln | Gly |
| 305 | | | | | 310 | | | | | 315 | | | | | 320 |

<210> 2519

<211> 317

<212> PRT

<213> Unknown (p27-dir-0-11 conceptual translation of range 34-984)

<220>

<221> VARIANT

<222> (1)...(317)

<223> Xaa = Any Amino Acid

<400>2519

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Leu | Leu | Glu | Gly | Gly | Asn | Gln | Thr | Ser | Thr | Phe | Glu | Phe | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Trp | Gly | Leu | Ser | Asp | Gln | Pro | Gln | Gln | His | Ile | Phe | Phe | Leu | |
| | | | 20 | | | | | 25 | | | | 30 | | | |
| Leu | Phe | Leu | Trp | Met | Tyr | Val | Val | Thr | Val | Ala | Gly | Asn | Leu | Leu | Ile |
| | | 35 | | | | 40 | | | | | 45 | | | | |
| Val | Leu | Ala | Ile | Gly | Thr | Asp | Thr | His | Leu | His | Thr | Pro | Met | Tyr | Phe |
| | 50 | | | | 55 | | | | | 60 | | | | | |
| Phe | Leu | Ala | Ser | Leu | Ser | Cys | Ala | Asp | Ile | Phe | Ser | Thr | Ser | Thr | Thr |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Val | Pro | Lys | Ala | Leu | Val | Asn | Ile | Gln | Thr | Gln | Ser | Arg | Ser | Ile | Ser |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Tyr | Ala | Gly | Cys | Leu | Ala | Gln | Leu | Tyr | Phe | Phe | Leu | Thr | Phe | Gly | Asp |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Met | Asp | Ile | Phe | Leu | Pro | Ala | Thr | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala |
| | 115 | | | | | 120 | | | | | 125 | | | | |
| Ile | Cys | His | Leu | Leu | His | Tyr | Met | Met | Ile | Met | Ser | Leu | His | Arg | Cys |
| | 130 | | | | 135 | | | | | | 140 | | | | |
| Ala | Phe | Leu | Val | Thr | Ala | Cys | Trp | Thr | Leu | Thr | Ser | Leu | Leu | Ala | Met |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Thr | Arg | Thr | Phe | Leu | Ile | Phe | Arg | Leu | Ser | Leu | Cys | Ser | Xaa | Ile | Leu |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Pro | Gly | Phe | Phe | Cys | Asp | Leu | Gly | Pro | Leu | Met | Lys | Val | Ser | Cys | Ser |
| | | 180 | | | | | 185 | | | | | 190 | | | |
| Asp | Ala | Gln | Val | Asn | Glu | Leu | Val | Leu | Leu | Phe | Leu | Gly | Gly | Ala | Val |
| | 195 | | | | | 200 | | | | | | 205 | | | |
| Ile | Leu | Ile | Pro | Phe | Met | Leu | Ile | Leu | Val | Ser | Tyr | Ile | Arg | Ile | Val |

```

      210              215              220
Ser Ala Ile Leu Arg Ala Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe
225              230              235              240
Ser Thr Cys Asp Ser His Leu Val Val Val Ala Leu Phe Phe Gly Thr
      245              250              255
Val Ile Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val
      260              265              270
Lys Glu Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu
      275              280              285
Leu Asn Pro Phe Ile Tyr Ser Met Arg Asn Lys Asp Met Lys Ala Ala
      290              295              300
Val Val Arg Leu Leu Lys Gly Arg Val Ser Phe Ser Gln
305              310              315

```

<210> 2520

<211> 242

<212> PRT

<213> Unknown (p80-dir-0-9 conceptual translation of range 5-731)

<400>2520

```

Thr Asp Ile Phe Phe Thr Ser Thr Thr Val Pro Lys Ala Leu Val Asn
1          5          10          15
Ile Gln Thr Gln Ser Thr Ser Ile Ser Tyr Ala Gly Cys Leu Ala Gln
20         25         30
Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala
35         40         45
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr
50         55         60
Met Met Ile Met Ser Leu Arg Arg Cys Ala Val Leu Val Ala Ala Cys
65         70         75         80
Trp Thr Leu Thr Ser Leu Val Ala Met Thr His Thr Phe Leu Ile Ser
85         90         95
Gln Leu Ser Phe Cys Ser Lys Ile Ile Pro Asp Phe Phe Cys Asp Leu
100        105        110
Gly Pro Leu Met Lys Val Ser Cys Phe Asp Thr Gln Val Asn Glu Leu
115        120        125
Val Leu Leu Phe Leu Gly Gly Thr Val Ile Leu Ile Pro Phe Met Leu
130        135        140
Val Leu Val Ser Tyr Ile Gln Ile Val Ser Ala Ile Leu Arg Ala Pro
145        150        155        160
Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu
165        170        175
Val Val Val Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu Cys
180        185        190
Pro Ser Ser Ser Ser Ser Ser Ser Val Glu Glu Asp Thr Ala Ala Ala
195        200        205
Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe Ile Tyr Ser
210        215        220
Leu Arg Asn Lys Asp Met Lys Ala Ala Val Val Arg Leu Leu Lys Gly
225        230        235        240
Arg Val

```

<210> 2521

<211> 225

<212> PRT

<213> Unknown (3983403-dir-0-8 conceptual translation of range 1-675)

<400>2521

```

Ala Thr Leu Ser Cys Val Asp Ile Leu Phe Thr Ser Thr Thr Val Pro
1          5          10          15

```

Lys Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala
 20 25 30
 Gly Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp
 35 40 45
 Ile Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
 50 55 60
 His Pro Leu His Tyr Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu
 65 70 75 80
 Leu Val Thr Val Cys Trp Thr Leu Thr Thr Val Val Ala Met Thr His
 85 90 95
 Thr Phe Leu Ile Phe Arg Leu Ser Phe Cys Ser Gln Lys Val Ile Pro
 100 105 110
 Asp Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Ile Ala Cys Ser Glu
 115 120 125
 Thr Arg Ile Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val Ile
 130 135 140
 Leu Ile Pro Phe Leu Leu Ile Leu Met Ser Tyr Ile Arg Ile Val Ser
 145 150 155 160
 Ala Ile Leu Arg Val Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser
 165 170 175
 Thr Cys Gly Ser His Leu Ser Val Val Ala Leu Phe Phe Gly Thr Val
 180 185 190
 Ile Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Asn Ser Val Val
 195 200 205
 Glu Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Val Leu
 210 215 220
 Asn
 225

<210> 2522

<211> 217

<212> PRT

<213> Unknown (p144-dir-0-8 conceptual translation of range 5-654)

<400>2522

Asp Asp Ile Leu Leu Val Ser Thr Ile Val Pro Lys Ala Leu Val Asn
 1 5 10 15
 Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly Cys Leu Val Gln
 20 25 30
 Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala
 35 40 45
 Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His Tyr
 50 55 60
 Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu Leu Val Thr Val Cys
 65 70 75 80
 Trp Ile Leu Thr Thr Val Val Ala Met Thr His Thr Phe Leu Ile Phe
 85 90 95
 Trp Phe Ser Phe Tyr Ser Lys Lys Val Ile Pro Gly Phe Phe Cys Asp
 100 105 110
 Leu Glu Pro Leu Ile Lys Ile Pro Cys Ser Glu Thr Arg Ile Asn Glu
 115 120 125
 Leu Val Leu Leu Phe Leu Gly Ser Ala Val Val Phe Ile Leu Leu Leu
 130 135 140
 Leu Ile Leu Val Ser Tyr Ile Gln Ile Val Ser Ala Ile Phe Arg Val
 145 150 155 160
 Pro Ser Ala Gln Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser His
 165 170 175
 Leu Ser Val Val Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu
 180 185 190
 Cys Pro Ser Ser Ser Ser Asn Ser Val Val Glu Asp Thr Ala Ala
 195 200 205

Ala Val Met Tyr Thr Val Val Thr Pro
210 215

<210> 2523

<211> 215

<212> PRT

<213> Unknown (p111-dir-0-8 conceptual translation of range 2-646)

<220>

<221> VARIANT

<222> (1)...(215)

<223> Xaa = Any Amino Acid

<400>2523

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Asp | Val | Cys | Phe | Ser | Ser | Thr | Thr | Val | Pro | Lys | Met | Leu | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asp | Met | Gln | Thr | Gly | Ser | His | Thr | Ile | Ser | Gln | Ala | Asp | Cys | Leu | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Val | Tyr | Phe | Ser | Ile | Leu | Phe | Gly | Asp | Leu | Asp | Asp | Phe | Leu | Leu |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Ala | Val | Met | Ser | Phe | Asp | Xaa | Tyr | Met | Ala | Ile | Cys | Arg | Pro | Leu | Cys |
| | | | 50 | | | 55 | | | | | 60 | | | | |
| Tyr | Ala | Thr | Ala | Met | Ser | Gln | Cys | Cys | Val | Leu | Leu | Val | Ala | Thr | |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Cys | Trp | Val | Ile | Ala | Gln | Leu | Asn | Ser | Leu | Leu | His | Thr | Val | Leu | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Gln | Leu | Thr | Phe | Cys | Ala | Asp | His | Thr | Ile | Pro | His | Phe | Phe | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Leu | Ala | Leu | Leu | Leu | Pro | Leu | Ser | Cys | Ser | Asp | Thr | Ser | Ile | Asn |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Glu | Leu | Val | Leu | Met | Ser | Met | Gly | Gly | Ala | Gly | Ile | Leu | Ile | Pro | Leu |
| | | | 130 | | | 135 | | | | | 140 | | | | |
| Met | Cys | Ile | Leu | Gly | Ser | Tyr | Ala | Gln | Ile | Ile | Ser | Ala | Ile | Leu | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Met | Pro | Ser | Ala | Gly | Ser | Lys | Arg | Ile | Ala | Phe | Ser | Thr | Ser | Ser | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| His | Leu | Ala | Val | Val | Ser | Leu | Phe | Tyr | Gly | Thr | Val | Ile | Ser | Glu | Tyr |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Cys | Pro | Ser | Pro | Ser | Gly | Ser | Ser | Asp | Glu | Ser | Ser | Leu | Ala | Ala |
| | | | 195 | | | | 200 | | | | | | 205 | | |
| Val | Leu | Tyr | Ala | Val | Val | Thr | | | | | | | | | |
| | | | 210 | | | 215 | | | | | | | | | |

<210> 2524

<211> 216

<212> PRT

<213> Unknown (2921629-dir-0-8 conceptual translation of range 2-649)

<400>2524

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Val | Asp | Met | Gly | Leu | Thr | Ser | Ser | Thr | Val | Thr | Lys | Met | Leu | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Ile | Gln | Thr | Arg | His | His | Thr | Ile | Thr | Tyr | Thr | Gly | Cys | Leu | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Met | Tyr | Phe | Phe | Leu | Met | Phe | Gly | Asp | Leu | Asp | Ser | Phe | Phe | Leu |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Ala | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | His | Pro | Leu | Cys |
| | | | 50 | | | 55 | | | | | 60 | | | | |
| Tyr | Ser | Thr | Val | Met | Arg | Pro | Gln | Val | Cys | Ala | Leu | Met | Leu | Ala | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Cys | Trp | Val | Leu | Thr | Asn | Ile | Val | Ala | Leu | Thr | His | Thr | Phe | Leu | Met |
| | | | | 85 | | | | | 90 | | | | | 95 | |

Ala Arg Leu Ser Phe Cys Val Thr Gly Glu Ile Ala His Phe Phe Cys
 100 105 110
 Asp Ile Thr Pro Val Leu Lys Leu Ser Cys Ser Asp Thr His Ile Asn
 115 120 125
 Glu Met Met Val Phe Val Leu Gly Gly Thr Val Leu Ile Val Pro Phe
 130 135 140
 Leu Cys Ile Val Thr Ser Tyr Ile His Ile Val Pro Ala Ile Leu Arg
 145 150 155 160
 Val Arg Thr Arg Gly Gly Val Gly Lys Ala Phe Ser Thr Cys Ser Ser
 165 170 175
 His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Ala Tyr
 180 185 190
 Leu Cys Pro Pro Ser Ile Ala Ser Glu Glu Lys Asp Ile Ala Ala Ala
 195 200 205
 Ala Met Tyr Thr Ile Val Thr Pro
 210 215

<210> 2525

<211> 342

<212> PRT

<213> Unknown (1256388-dir-2-13 conceptual translation of range 379-1402)

<220>

<221> VARIANT

<222> (1)...(342)

<223> Xaa = Any Amino Acid

<400>2525

Phe Xaa Leu Ser Phe Leu Asn Tyr Arg Cys Ser Ile Arg Met Glu Asn
 1 5 10 15
 Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser Gly Phe Pro
 20 25 30
 Glu Gln Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met Tyr Leu Val
 35 40 45
 Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly Ser Asp Pro
 50 55 60
 His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Phe Ala
 65 70 75 80
 Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu Phe Asn Val
 85 90 95
 Gln Thr Gln Cys His Thr Ile Ser Tyr Thr Gly Cys Leu Thr Gln Met
 100 105 110
 Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe Leu Ala Val
 115 120 125
 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Ser
 130 135 140
 Thr Ile Met Asn Ala Arg Ile Cys Val Leu Met Leu Ile Leu Cys Trp
 145 150 155 160
 Ile Leu Thr Asn Val Val Ala Leu Thr His Thr Leu Leu Met Ala Arg
 165 170 175
 Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe Cys Asp Val
 180 185 190
 Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val Asn Glu Leu
 195 200 205
 Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro Phe Val Ser
 210 215 220
 Ile Val Ile Ser Tyr Val His Ile Val Phe Ala Val Leu Arg Ile Gln
 225 230 235 240
 Ser Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser Ser His Leu
 245 250 255
 Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val Tyr Leu Phe

[illegible]

<210> 2526

<211> 216

<212> PRT

<213> Unknown (p101-dir-0-8 conceptual translation of range 2-649)

<400>2526

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ala | Asp | Ile | Cys | Phe | Thr | Ser | Ala | Ser | Ile | Pro | Lys | Met | Leu | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Ile | Glu | Thr | Gln | Gln | Gln | Thr | Ile | Ser | Tyr | Val | Gly | Cys | Ile | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Leu | Tyr | Phe | Leu | Leu | Met | Phe | Gly | Gly | Leu | Asp | Asn | Leu | Leu | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Arg | Pro | Leu | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Tyr | Thr | Thr | Val | Met | Ser | Pro | Gln | His | Cys | Val | Leu | Met | Leu | Ser | Val |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Cys | Trp | Ala | Leu | Thr | Asn | Ile | Pro | Ala | Leu | Thr | His | Ser | Ile | Leu | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | His | Leu | Asp | Phe | Cys | Ser | His | His | Ala | Ile | Pro | His | Phe | Tyr | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Ile | Ser | Pro | Leu | Leu | Lys | Leu | Ala | Cys | Ser | Asp | Ala | His | Leu | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Glu | Leu | Met | Val | Ile | Ile | Met | Gly | Ala | Ile | Phe | Leu | Thr | Gly | Pro | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ala | Leu | Ile | Val | Leu | Ser | Tyr | Ala | His | Ile | Thr | Ser | Ala | Ile | Leu | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Phe | Ser | Ser | Pro | Glu | Gly | Arg | Trp | Lys | Ala | Phe | Ser | Thr | Cys | Gly | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| His | Leu | Thr | Val | Val | Leu | Leu | Phe | Tyr | Gly | Ser | Leu | Met | Gly | Val | Tyr |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Phe | Pro | Ser | Ser | Ser | Tyr | Ser | Val | Gln | Arg | Glu | Ser | Ser | Ala | Ala |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Val | Leu | Tyr | Met | Val | Val | Thr | Pro | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 2527

<211> 176

<212> PRT

<213> Unknown (3273640-dir-0-7 conceptual translation of range 4-531)

<400>2527

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Ala | Leu | Ala | Tyr | Asp | Arg | Phe | Val | Ala | Ile | Cys | His | Pro | Leu | His |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Tyr | Thr | Thr | Ile | Met | Ser | Pro | Gln | Leu | Cys | Gly | Leu | Leu | Ala | Gly | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Leu | Trp | Met | Leu | Ser | Cys | Phe | Ile | Ser | Leu | Thr | His | Ile | Leu | Leu | Met |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Arg | Leu | Val | Phe | Cys | Gly | Asn | Asn | Lys | Ile | Pro | His | Tyr | Phe | Cys |
| | 50 | | | | | 55 | | | | | 60 | | | | |

```

Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn
65          70          75          80
Lys Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe
      85          90          95
Ile Cys Ile Leu Ala Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys
      100         105         110
Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
      115         120         125
His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile Gly Val Tyr
      130         135         140
Leu Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys Ala Ser Ala
145         150         155         160
Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Cys Ser
      165         170         175

```

<210> 2528

<211> 175

<212> PRT

<213> Unknown (3273644-dir-0-7 conceptual translation of range 4-528)

<400>2528

```

Ala Leu Glu Tyr Asp Arg Phe Leu Ala Ile Cys His Pro Leu His Tyr
1          5          10          15
Thr Thr Ile Met Ser Pro Gln Leu Cys Gly Leu Leu Ala Gly Gly Leu
      20         25         30
Trp Met Leu Ser Cys Phe Ile Ser Leu Thr His Ile Leu Leu Met Ala
      35         40         45
Arg Leu Val Phe Cys Gly Asn Lys Ile Pro His Tyr Phe Cys Asp
      50         55         60
Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn Lys
65          70          75          80
Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe Ile
      85          90          95
Cys Ile Leu Ala Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys Val
      100         105         110
Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
      115         120         125
Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile Gly Val Tyr Leu
      130         135         140
Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys Ala Ser Ala Val
145         150         155         160
Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Cys Ser
      165         170         175

```

<210> 2529

<211> 158

<212> PRT

<213> Unknown (3273656-dir-0-6 conceptual translation of range 4-477)

<400>2529

```

Ala Leu Glu Tyr Asp Arg Phe Leu Ala Ile Cys His Pro Leu His Tyr
1          5          10          15
Thr Thr Thr Met Ser Pro Gln Leu Cys Gly Leu Leu Ala Gly Gly Leu
      20         25         30
Trp Met Leu Ser Cys Phe Ile Ser Leu Thr His Ile Leu Leu Met Ala
      35         40         45
Arg Leu Val Phe Cys Gly Asn Lys Ile Pro His Tyr Phe Cys Asp
      50         55         60
Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn Lys
65          70          75          80
Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe Ile

```



```
<210> 2530
<211> 176
<212> PRT
<213> Unknown (3273650-dir-0-7 conceptual translation of range 1-528)
```

```
<210> 2531
<211> 157
<212> PRT
<213> Unknown (902676-dir-0-6 conceptual translation of range 2-472)
```

1537

Thr Thr Ile Gly Val Tyr Leu Cys Pro Ser Ser Val Arg Thr Ala Val
 130 135 140
 Lys Glu Lys Ala Ser Ala Val Met Tyr Thr Ala Val Thr
 145 150 155

<210> 2532

<211> 313

<212> PRT

<213> Unknown (p82-dir-0-11 conceptual translation of range 1-939)

<400>2532

Met Glu Pro Arg Asn Gln Thr Ser Ala Ser Gln Phe Ile Leu Leu Gly
 1 5 10 15
 Leu Ser Glu Lys Pro Glu Gln Glu Thr Leu Leu Phe Ser Leu Phe Phe
 20 25 30
 Cys Met Tyr Leu Val Met Val Val Gly Asn Leu Leu Ile Ile Leu Ala
 35 40 45
 Ile Ser Ile Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Leu Val Asp Phe Cys Leu Ala Thr Asn Thr Ile Pro Lys
 65 70 75 80
 Met Leu Val Ser Leu Gln Thr Gly Ser Lys Ala Ile Ser Tyr Pro Cys
 85 90 95
 Cys Leu Ile Gln Met Tyr Phe Phe His Phe Phe Gly Ile Val Asp Ser
 100 105 110
 Val Ile Ile Ala Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
 115 120 125
 Pro Leu His Tyr Ala Lys Ile Met Ser Leu Arg Leu Cys Arg Leu Leu
 130 135 140
 Val Gly Ala Leu Trp Ala Phe Ser Cys Phe Ile Ser Leu Thr His Ile
 145 150 155 160
 Leu Leu Met Ala Arg Leu Val Phe Cys Gly Ser His Glu Val Pro His
 165 170 175
 Tyr Phe Cys Asp Leu Thr Pro Ile Leu Arg Leu Ser Cys Thr Asp Thr
 180 185 190
 Ser Val Asn Arg Ile Phe Ile Leu Ile Val Ala Gly Met Val Ile Ala
 195 200 205
 Thr Pro Phe Val Cys Ile Leu Ala Ser Tyr Ala Arg Ile Leu Val Ala
 210 215 220
 Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile
 245 250 255
 Gly Val Tyr Leu Cys Pro Ser Ser Val Leu Thr Thr Val Lys Glu Lys
 260 265 270
 Ala Ser Ala Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Leu Lys Gly Ala Leu Arg Lys Leu
 290 295 300
 Val Asn Arg Lys Ile Thr Ser Ser Ser
 305 310

<210> 2533

<211> 157

<212> PRT

<213> Unknown (902331-dir-0-6 conceptual translation of range 2-472)

<400>2533

Ile Cys His Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys
 1 5 10 15
 Val Gln Leu Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala Leu

```

      20      25      30
Leu His Thr Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile
      35      40      45
Ile His His Phe Leu Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys
      50      55      60
Ser Asp Val Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Asp Leu
      65      70      75      80
Leu Ala Leu Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu Ile
      85      90      95
Phe Ser Thr Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala
      100      105      110
Val Ser Thr Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr Gly
      115      120      125
Thr Ala Ile Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro Glu
      130      135      140
Ser Asp Thr Leu Ser Thr Ile Met Tyr Ser Met Val Ala
      145      150      155

```

<210> 2534

<211> 217

<212> PRT

<213> Unknown (p152-rev-0-8 conceptual translation of range 2-652)

<400>2534

```

Phe Leu Asp Ile Gly Phe Ile Ser Thr Ile Ile Pro Lys Met Leu Asp
1      5      10      15
His Ile Ser Ser Gly Ile Lys Leu Ile Ser Tyr Gly Glu Cys Leu Thr
      20      25      30
Gln Leu Tyr Phe Ser Gly Leu Phe Ala Asp Leu Asp Asn Asn Phe Leu
      35      40      45
Leu Ala Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser His Pro Leu
      50      55      60
His Tyr Ala Leu Thr Met Asn Ser Gln Arg Cys Val Leu Leu Val Ala
      65      70      75      80
Val Ser Trp Val Ile Thr Ile Leu His Ala Leu Val His Thr Leu Leu
      85      90      95
Val Thr Arg Leu Ser Phe Cys Gly Pro Asn Ile Ile Pro His Phe Phe
      100      105      110
Cys Asp Leu Val Pro Leu Leu Lys Leu Ala Cys Ser Ser Thr Cys Val
      115      120      125
Asn Asp Leu Val Leu Ile Leu Val Ala Gly Thr Leu Leu Ile Ala Pro
      130      135      140
Phe Val Cys Ile Leu Met Ser Tyr Phe Tyr Ile Ala Leu Ala Ile Leu
      145      150      155      160
Arg Ile Asp Ser Pro Arg Gly Lys Gln Arg Ala Phe Ser Ser Cys Thr
      165      170      175
Ser His Leu Ser Val Val Ser Leu Phe Tyr Ser Thr Ala Ile Gly Val
      180      185      190
Tyr Leu Cys Pro Pro Ser Ser His Ser Asp Gly Lys Asp Arg Val Phe
      195      200      205
Ser Val Met Tyr Thr Val Val Thr Pro
      210      215

```

<210> 2535

<211> 156

<212> PRT

<213> Unknown (902317-dir-0-6 conceptual translation of range 5-472)

<400>2535

```

Cys His Pro Phe His Tyr Thr Met Ile Leu Thr Arg Met Leu Cys Val
1      5      10      15

```

Lys Met Val Val Met Cys His Ala Leu Ser His Leu His Ala Met Leu
 20 25 30
 His Thr Phe Leu Met Gly Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile
 35 40 45
 Pro His Phe Phe Cys Asp Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr
 50 55 60
 Ser Thr Tyr Leu Asn Thr Leu Met Ile His Thr Glu Gly Ala Val Val
 65 70 75 80
 Ile Ser Gly Ala Leu Ala Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile
 85 90 95
 Leu Val Val Leu Arg Ile Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe
 100 105 110
 Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr
 115 120 125
 Leu Ser Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys
 130 135 140
 Gly Arg Ile Ile Thr Val Val Tyr Thr Val Val Thr
 145 150 155

<210> 2536

<211> 215

<212> PRT

<213> Unknown (OST226-dir-0-8 conceptual translation of range 2-646)

<400>2536

Leu Thr Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Gln
 1 5 10 15
 Ile Ile Phe Ser Pro Thr Lys Val Ile Ser Tyr Thr Gly Cys Leu Ala
 20 25 30
 Gln Thr Tyr Ser Ser Leu Leu Arg Arg His Glu Asn Phe Ile Leu Ala
 35 40 45
 Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His Pro Phe His Tyr
 50 55 60
 Thr Met Ile Leu Thr Arg Met Leu Cys Val Lys Met Val Val Met Cys
 65 70 75 80
 His Ala Leu Ser His Leu His Ala Met Leu His Thr Phe Leu Met Gly
 85 90 95
 Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile Pro His Phe Phe Cys Asp
 100 105 110
 Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr Ser Thr Tyr Leu Asn Thr
 115 120 125
 Leu Met Ile His Thr Glu Gly Ala Val Val Ile Ser Gly Ala Leu Ala
 130 135 140
 Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile Leu Val Val Leu Arg Ile
 145 150 155 160
 Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe Ser Thr Arg Gly Ser His
 165 170 175
 Leu Thr Val Val Ala Ile Phe Tyr Gly Thr Leu Ser Trp Val Tyr Phe
 180 185 190
 Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys Gly Arg Ile Ile Thr Val
 195 200 205
 Val Tyr Thr Val Val Thr Pro
 210 215

<210> 2537

<211> 319

<212> PRT

<213> Unknown (4190944-dir-20-13 conceptual translation of range 2175-3131)

<220>

<221> VARIANT

<222> (1)...(319)

<223> Xaa = Any Amino Acid

<400>2537

Gln Gln Met Asp Asn Ser Asn Trp Thr Ser Val Ser His Phe Val Leu
 1 5 10 15
 Leu Gly Ile Ser Thr His Pro Glu Glu Gln Ile Pro Leu Phe Leu Val
 20 25 30
 Phe Ser Leu Met Tyr Ala Ile Asn Ile Ser Gly Asn Leu Ala Ile Ile
 35 40 45
 Thr Leu Ile Leu Ser Ala Pro Arg Leu His Ile Pro Met Tyr Ile Phe
 50 55 60
 Leu Ser Asn Leu Ala Leu Thr Asp Ile Cys Phe Thr Ser Thr Thr Val
 65 70 75 80
 Pro Lys Met Leu Gln Ile Ile Phe Ser Pro Thr Lys Val Ile Ser Tyr
 85 90 95
 Thr Gly Cys Leu Ala Gln Thr Tyr Phe Phe Ile Cys Phe Ala Val Met
 100 105 110
 Glu Asn Phe Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile
 115 120 125
 Cys His Pro Phe His Tyr Thr Met Ile Leu Thr Arg Met Leu Cys Val
 130 135 140
 Lys Met Val Val Met Cys His Ala Leu Ser His Leu His Ala Met Leu
 145 150 155 160
 His Thr Phe Leu Ile Gly Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile
 165 170 175
 Pro His Phe Phe Cys Asp Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr
 180 185 190
 Ser Thr Tyr Leu Asn Thr Leu Met Ile His Thr Glu Gly Ala Val Val
 195 200 205
 Ile Ser Gly Ala Leu Ala Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile
 210 215 220
 Leu Val Val Leu Arg Ile Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe
 225 230 235 240
 Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr
 245 250 255
 Leu Ser Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys
 260 265 270
 Gly Arg Ile Ile Thr Val Val Tyr Thr Val Val Thr Pro Met Leu Asn
 275 280 285
 Pro Phe Ile Tyr Ser Leu Arg Asn Gly Asp Val Lys Gly Gly Phe Met
 290 295 300
 Lys Trp Met Ser Arg Met Gln Thr Phe Phe Phe Arg Xaa Asn Pro
 305 310 315

<210> 2538

<211> 326

<212> PRT

<213>. Unknown (4190944-dir-490-12 conceptual translation of range 49118-50095)

<220>

<221> VARIANT

<222> (1)...(326)

<223> Xaa = Any Amino Acid

<400>2538

Ile Cys Tyr Ser Val Ser Leu Ser Leu Gly Glu Pro Thr Thr Met Gly
 1 5 10 15
 Arg Asn Asn Leu Thr Arg Pro Ser Glu Phe Ile Leu Leu Gly Leu Ser
 20 25 30

Ser Arg Pro Glu Asp Gln Lys Pro Leu Phe Ala Val Phe Leu Pro Ile
 35 40 45
 Tyr Leu Ile Thr Val Ile Gly Asn Leu Leu Ile Ile Leu Ala Ile Arg
 50 55 60
 Ser Asp Thr Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Ile Leu
 65 70 75 80
 Ser Phe Val Asp Ile Cys Tyr Val Thr Val Ile Ile Pro Lys Met Leu
 85 90 95
 Val Asn Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr Gly Glu Cys Leu
 100 105 110
 Thr Gln Met Tyr Phe Phe Leu Ala Phe Gly Asn Thr Asp Ser Tyr Leu
 115 120 125
 Leu Ala Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn Pro Phe
 130 135 140
 His Tyr Ile Thr Ile Met Ser His Arg Cys Cys Val Leu Leu Leu Val
 145 150 155 160
 Leu Ser Phe Cys Ile Pro His Phe His Ser Leu Leu His Ile Leu Leu
 165 170 175
 Thr Asn Gln Leu Ile Phe Cys Ala Ser Asn Val Ile His His Phe Phe
 180 185 190
 Cys Asp Asp Gln Pro Val Leu Lys Leu Ser Cys Ser Ser His Phe Val
 195 200 205
 Lys Glu Ile Thr Val Met Thr Glu Gly Leu Ala Val Ile Met Thr Pro
 210 215 220
 Phe Ser Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Thr Val Leu
 225 230 235 240
 Lys Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly
 245 250 255
 Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Ser Ile Ser Tyr Val
 260 265 270
 Tyr Phe Gln Pro Leu Ser Asn Tyr Thr Val Lys Asp Gln Ile Ala Thr
 275 280 285
 Ile Ile Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser
 290 295 300
 Leu Arg Asn Lys Asp Met Lys Gln Gly Leu Ala Lys Leu Met His Arg
 305 310 315 320
 Met Lys Cys Gln Xaa Lys
 325

<210> 2539

<211> 214

<212> PRT

<213> Unknown (hg23-dir-0-8 conceptual translation of range 4-645)

<400>2539

Val Asp Ile Cys Tyr Val Thr Val Ile Ile Pro Lys Met Leu Val Asn
 1 5 10 15
 Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr Ser Glu Cys Leu Thr Gln
 20 25 30
 Met Tyr Phe Phe Leu Ala Cys Gly Asn Thr Asp Ser Tyr Leu Leu Ala
 35 40 45
 Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn Pro Phe His Tyr
 50 55 60
 Ile Thr Ile Met Ser His Arg Cys Cys Val Leu Leu Leu Val Leu Ser
 65 70 75 80
 Phe Cys Ile Pro His Leu His Ser Leu Leu His Ile Leu Leu Thr Asn
 85 90 95
 Gln Val Ile Phe Cys Ala Ser Asn Val Ile His His Phe Phe Cys Asp
 100 105 110
 Asp Gln Pro Val Leu Lys Leu Ser Cys Ser Ser His Phe Val Lys Glu
 115 120 125

Ile Thr Val Met Thr Glu Gly Leu Ala Val Ile Met Thr Pro Phe Ser
 130 135 140
 Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Thr Val Leu Lys Ile
 145 150 155 160
 Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser His
 165 170 175
 Leu Thr Val Val Thr Leu Phe Tyr Gly Ser Ile Ser Tyr Leu Tyr Phe
 180 185 190
 Gln Pro Leu Ser Asn Tyr Thr Val Lys Asp Gln Ile Ala Thr Ile Ile
 195 200 205
 Tyr Pro Val Leu Thr Pro
 210

<210> 2540

<211> 316

<212> PRT

<213> Unknown (4190944-dir-624-13 conceptual translation of range 62576-63523)

<400>2540

Met Gly Met Ser Asn Leu Thr Arg Leu Ser Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Leu Ser Ser Arg Ser Glu Asp Gln Arg Pro Leu Phe Ala Leu Phe Leu
 20 25 30
 Ile Ile Tyr Leu Val Thr Leu Met Gly Asn Leu Leu Ile Ile Leu Ala
 35 40 45
 Ile His Ser Asp Pro Arg Leu Gln Asn Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 Ile Leu Ser Phe Ala Asp Ile Cys Tyr Thr Thr Val Ile Val Pro Lys
 65 70 75 80
 Met Leu Val Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Ala Glu
 85 90 95
 Cys Leu Ala Gln Met Tyr Phe Phe Leu Val Phe Gly Asn Ile Asp Ser
 100 105 110
 Tyr Leu Leu Ala Ala Met Ala Ile Asn Arg Cys Val Ala Ile Cys Asn
 115 120 125
 Pro Phe His Tyr Val Thr Val Met Asn Arg Arg Cys Cys Val Leu Leu
 130 135 140
 Leu Ala Phe Pro Ile Thr Phe Ser Tyr Phe His Ser Leu Leu His Val
 145 150 155 160
 Leu Leu Val Asn Arg Leu Thr Phe Cys Thr Ser Asn Val Ile His His
 165 170 175
 Phe Phe Cys Asp Val Asn Pro Val Leu Lys Leu Ser Cys Ser Ser Thr
 180 185 190
 Phe Val Asn Glu Ile Val Ala Met Thr Glu Gly Leu Ala Ser Val Met
 195 200 205
 Ala Pro Phe Val Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Ala
 210 215 220
 Val Leu Lys Ile Pro Ser Ala Ala Gly Lys His Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Leu Thr Val Val Ile Leu Phe Tyr Gly Ser Ile Ser
 245 250 255
 Tyr Val Tyr Leu Gln Pro Leu Ser Ser Tyr Thr Val Lys Asp Arg Ile
 260 265 270
 Ala Thr Ile Asn Tyr Thr Val Leu Thr Ser Val Leu Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Gln Lys Leu Ile
 290 295 300
 Asn Lys Ile Lys Ser Gln Met Ser Arg Phe Ser Thr
 305 310 315

<210> 2541
 <211> 327
 <212> PRT
 <213> Unknown (4190944-dir-1371-13 conceptual translation of range 137254-138234)

<220>
 <221> VARIANT
 <222> (1)...(327)
 <223> Xaa = Any Amino Acid

<400>2541
 Arg Lys Ser Arg Asp Met Glu Ile Lys Asn Tyr Ser Ser Ser Thr Ser
 1 5 10 15
 Gly Phe Ile Leu Gly Leu Ser Ser Asn Pro Gln Leu Gln Lys Pro
 20 25 30
 Leu Phe Ala Ile Phe Leu Ile Met Tyr Leu Leu Ala Ala Val Gly Asn
 35 40 45
 Val Leu Ile Ile Pro Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro
 50 55 60
 Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr
 65 70 75 80
 Thr Val Ile Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys
 85 90 95
 Val Ile Ser Tyr Val Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Ala
 100 105 110
 Phe Gly Asn Thr Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg
 115 120 125
 Leu Val Ala Ile Cys Asn Pro Leu His Tyr Asp Val Val Met Lys Pro
 130 135 140
 Arg His Cys Leu Leu Met Leu Leu Gly Ser Cys Ser Ile Ser His Leu
 145 150 155 160
 His Ser Leu Phe Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala
 165 170 175
 Ser His Ile Ile Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys
 180 185 190
 Leu Ser Cys Ser Asp Thr Ser Ser Ser Gln Met Val Val Met Thr Glu
 195 200 205
 Thr Leu Ala Val Ile Val Thr Pro Phe Leu Cys Ile Ile Phe Ser Tyr
 210 215 220
 Leu Arg Ile Met Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys
 225 230 235 240
 Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Ala Val Ala Leu
 245 250 255
 Phe Tyr Gly Ser Ile Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr
 260 265 270
 Ser Val Val Arg Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr
 275 280 285
 Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys
 290 295 300
 Arg Gly Leu Lys Lys Leu Gln Asp Arg Ile Tyr Arg Xaa Lys Glu Gln
 305 310 315 320
 Asn Val Gly Val Ser Xaa Leu
 325

<210> 2542
 <211> 216
 <212> PRT
 <213> Unknown (hg16-dir-0-8 conceptual translation of range 1-648)

<400>2542

Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
 1 5 10 15
 Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Val Gly Cys Leu Ala
 20 25 30
 Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
 35 40 45
 Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60
 Tyr Asp Val Val Met Lys Pro Arg His Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Tyr Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
 100 105 110
 Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val Thr Val Leu Arg
 145 150 155 160
 Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Ile Ile Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg Asp Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2543

<211> 323

<212> PRT

<213> Unknown (4190944-dir-1112-13 conceptual translation of range 111405-112373)

<220>

<221> VARIANT

<222> (1)...(323)

<223> Xaa = Any Amino Acid

<400>2543

Arg Asp Met Glu Thr Lys Asn Tyr Ser Ser Ser Thr Ser Gly Phe Ile
 1 5 10 15
 Leu Leu Gly Leu Ser Ser Asn Pro Lys Leu Gln Lys Pro Leu Phe Ala
 20 25 30
 Ile Phe Leu Ile Met Tyr Leu Leu Thr Ala Val Gly Asn Val Leu Ile
 35 40 45
 Ile Leu Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile
 65 70 75 80
 Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Ile Ile Ser
 85 90 95
 Tyr Val Gly Cys Leu Ile Gln Met Tyr Phe Phe Met Ala Phe Gly Asn
 100 105 110
 Thr Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala
 115 120 125
 Ile Cys Asn Pro Leu His Tyr Asp Val Val Met Lys Pro Trp His Cys
 130 135 140
 Leu Leu Met Leu Leu Gly Ser Cys Ser Ile Ser His Leu His Ser Leu
 145 150 155 160

Phe Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Ile
 165 170 175
 Ile Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys
 180 185 190
 Ser Asp Thr Ser Ser Ser Gln Met Val Val Met Thr Glu Thr Leu Ala
 195 200 205
 Val Ile Val Thr Pro Phe Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile
 210 215 220
 Ile Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala
 225 230 235 240
 Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Val Leu Phe Tyr Gly
 245 250 255
 Ser Val Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Met
 260 265 270
 Lys Gly Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu
 275 280 285
 Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu
 290 295 300
 Lys Lys Leu Arg His Arg Ile Tyr Ser Xaa Lys Glu Gln Asn Val Gly
 305 310 315 320
 Met Ser Lys

<210> 2544

<211> 216

<212> PRT

<213> Unknown (OST046-dir-0-8 conceptual translation of range 2-649)

<400>2544

Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
 1 5 10 15
 Asn Phe Leu Ser Glu Thr Lys Ile Ile Ser Tyr Val Gly Cys Leu Val
 20 25 30
 Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
 35 40 45
 Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60
 Tyr Asp Val Val Met Lys Pro Trp His Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
 100 105 110
 Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val Thr Val Leu Arg
 145 150 155 160
 Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Val Leu Phe Tyr Gly Ser Val Ile Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Met Lys Gly Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2545

<211> 216

<212> PRT

<213> Unknown (p100-dir-0-8 conceptual translation of range 2-649)

<400>2545

```

Leu Val Asp Leu Cys Phe Thr Thr Val Ile Val Pro Gln Met Leu Val
 1           5           10           15
Ser Met Leu Met Gln Asn Lys Ala Ile Ser Phe Ala Gln Cys Ile Ala
      20           25           30
Gln Met Tyr Phe Phe Val Ala Phe Gly Ile Thr Asp Ser Phe Leu Leu
      35           40           45
Ala Ala Met Pro Ile Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu His
      50           55           60
Tyr Thr Thr Thr Met Ser Pro Arg Arg Cys Val Leu Leu Val Ala Met
      65           70           75           80
Ser Trp Val Val Ser His Phe His Ser Leu Val His Thr Leu Leu Met
      85           90           95
Ala Arg Leu Ser Phe Cys Gly Pro Asn Ala Ile His His Phe Phe Cys
      100          105          110
Asp Val Gln Pro Leu Leu Thr Leu Ser Cys Ser Asp Thr Ser Ile Asn
      115          120          125
Glu Val Leu Ala Phe Thr Glu Gly Ser Leu Val Ile Met Ser Pro Phe
      130          135          140
Leu Phe Ile Val Ile Ser Tyr Val Trp Ile Thr Arg Ala Val Leu Arg
      145          150          155          160
Val Pro Ser Gly Arg Gly Arg Tyr Lys Ala Phe Ser Thr Cys Ser Ser
      165          170          175
His Ile Thr Val Val Val Leu Phe Tyr Gly Thr Ile Val Ser Val Tyr
      180          185          190
Ile Arg Pro Ser Ser Thr Tyr Ser Val Thr Lys Asp Arg Val Val Thr
      195          200          205
Val Ile Tyr Thr Val Val Thr Pro
      210          215

```

<210> 2546

<211> 328

<212> PRT

<213> Unknown (4190944-rev-159-13 conceptual translation of range 16099-17082)

<220>

<221> VARIANT

<222> (1)...(328)

<223> Xaa = Any Amino Acid

<400>2546

```

Phe Gln Ala Gly Xaa Leu Ser Leu Met Met Ser Phe Ala Pro Asn Ala
 1           5           10           15
Ser His Ser Pro Val Phe Leu Leu Leu Gly Phe Ser Arg Ala Asn Ile
      20           25           30
Ser Tyr Thr Leu Leu Phe Phe Leu Phe Leu Ala Ile Tyr Leu Thr Thr
      35           40           45
Ile Leu Gly Asn Val Thr Leu Val Leu Leu Ile Ser Trp Asp Ser Arg
      50           55           60
Leu His Ser Pro Met Tyr Tyr Leu Leu Arg Gly Leu Ser Val Ile Asp
      65           70           75           80
Met Gly Leu Ser Thr Val Thr Leu Pro Gln Leu Leu Ala His Leu Val
      85           90           95
Ser His Tyr Pro Thr Ile Pro Ala Ala Arg Cys Leu Ala Gln Phe Phe
      100          105          110
Phe Phe Tyr Ala Phe Gly Val Thr Asp Thr Leu Val Ile Ala Val Met
      115          120          125
Ala Leu Asp Arg Tyr Val Ala Ile Cys Asp Pro Leu His Tyr Ala Leu

```

| | | |
|---|-----|-----|
| 130 | 135 | 140 |
| Val Met Asn His Gln Arg Cys Ala Cys Leu Leu Ala Leu Ser Trp Val | | |
| 145 | 150 | 155 |
| Val Ser Ile Leu His Thr Met Leu Arg Val Gly Leu Val Leu Pro Leu | | |
| | 165 | 170 |
| Cys Trp Thr Gly Asp Ala Gly Gly Asn Val Asn Leu Pro His Phe Phe | | |
| | 180 | 185 |
| Cys Asp His Arg Pro Leu Leu Arg Ala Ser Cys Ser Asp Ile His Ser | | |
| | 195 | 200 |
| Asn Glu Leu Ala Ile Phe Phe Glu Gly Gly Phe Leu Met Leu Gly Pro | | |
| | 210 | 215 |
| Cys Ala Leu Ile Val Leu Ser Tyr Val Arg Ile Gly Ala Ala Ile Leu | | |
| 225 | 230 | 235 |
| Arg Leu Pro Ser Ala Ala Gly Arg Arg Arg Ala Val Ser Thr Cys Gly | | |
| | 245 | 250 |
| Ser His Leu Thr Met Val Gly Phe Leu Tyr Gly Thr Ile Ile Cys Val | | |
| | 260 | 265 |
| Tyr Phe Gln Pro Pro Phe Gln Asn Ser Gln Tyr Gln Asp Met Val Ala | | |
| | 275 | 280 |
| Ser Val Met Tyr Thr Ala Ile Thr Pro Leu Ala Asn Pro Phe Val Tyr | | |
| | 290 | 295 |
| Ser Leu His Asn Lys Asp Val Lys Gly Ala Leu Cys Arg Leu Leu Glu | | |
| 305 | 310 | 315 |
| Trp Val Lys Val Asp Pro Xaa Leu | | |
| | 325 | |

<210> 2547

<211> 216

<212> PRT

<213> Unknown (hg99-dir-0-8 conceptual translation of range 1-648)

<400>2547

| | |
|---|-----|
| Phe Ala Asp Leu Cys Phe Ala Ser Val Thr Val Pro Lys Met Leu Asp | |
| 1 | 5 |
| Asn Leu Leu Ala His Asp His Ser Ile Ser Leu Ala Gly Cys Leu Thr | |
| | 20 |
| Gln Met Tyr Phe Phe Phe Ala Leu Gly Val Thr Asp Ser Cys Leu Leu | |
| | 35 |
| Ala Asp Met Ala Tyr Asp Cys Tyr Val Asp Ile Arg His Pro Leu Pro | |
| | 50 |
| Tyr Asp Thr Arg Met Ser Arg Ala Met Cys Ala Ala Leu Val Gly Met | |
| 65 | 70 |
| Ala Trp Val Val Ser His Val His Ser Leu Leu Tyr Ile Leu Leu Met | |
| | 85 |
| Ala Arg Leu Ser Phe Cys Ala Ser His Gln Val Pro His Phe Phe Cys | |
| | 100 |
| Asp His Gln Pro Leu Leu Arg Leu Ser Cys Ser Asp Asn His His Ile | |
| | 115 |
| Gln Leu Leu Ile Phe Thr Glu Gly Ala Ala Val Val Val Thr Pro Phe | |
| | 130 |
| Leu Leu Ile Leu Ala Ser Tyr Gly Ala Ile Ala Ala Val Leu Gln | |
| 145 | 150 |
| Leu Pro Ser Ala Ser Gly Arg Leu Arg Ala Val Ser Thr Cys Gly Ser | |
| | 165 |
| His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Val Ile Ala Val Tyr | |
| | 180 |
| Phe Gln Ala Thr Ser Arg Arg Glu Ala Glu Trp Gly Arg Val Ala Thr | |
| | 195 |
| Val Met Tyr Thr Val Val Thr Pro | |
| | 210 |

<210> 2548

<211> 319

<212> PRT

<213> Unknown (p16-dir-0-11 conceptual translation of range 1-960)

<400>2548

```

Met Ala Pro Thr Asn Leu Thr Ser Ala Pro Val Phe Leu Leu Leu Gly
 1           5           10           15
Leu Val Thr Glu Gln Thr Asp Ala His Pro Leu Leu Phe Leu Leu Cys
          20          25          30
Leu Gly Ile Tyr Leu Leu Asn Ala Leu Ser Asn Leu Ser Met Val Ala
          35          40          45
Leu Val Arg Ser Asp Gly Ala Leu Arg Ser Pro Met Tyr Tyr Phe Leu
          50          55          60
Gly His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro
65          70          75          80
Arg Leu Leu Ala Gly Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln
          85          90          95
Ala Cys Phe Ala Glu Met Tyr Phe Phe Val Ala Leu Gly Ile Thr Glu
          100         105         110
Ser Tyr Leu Pro Ala Ala Met Ser Tyr Asp Arg Ala Thr Ala Ala Cys
          115         120         125
Arg Pro Leu Arg Tyr Gly Ala Leu Val Thr His Gly Arg Cys Ala Ser
          130         135         140
Leu Val Arg Ala Ser Trp Ala Val Thr His Leu His Ser Leu Leu His
145         150         155         160
Thr Leu Leu Leu Ser Ala Leu Ser Tyr Pro Tyr Pro Thr Pro Val Arg
          165         170         175
Pro Phe Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp
          180         185         190
Thr Ser Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Ala Val Val
          195         200         205
Leu Ala Pro Leu Leu Leu Val Phe Leu Ser Tyr Ala Arg Ile Leu Val
          210         215         220
Ala Val Leu Gly Leu Pro Arg Pro Arg Arg Ala Phe Ser Thr Cys Gly
225         230         235         240
Ala His Leu Val Ala Val Ala Val Ala Val Ala Leu Phe Phe Gly Ser
          245         250         255
Val Leu Ser Val Tyr Phe Pro Pro Ser Ser Ala Tyr Ser Ala Arg Tyr
          260         265         270
Asp Arg Leu Ala Ser Val Val Tyr Ala Val Ile Thr Pro Thr Leu Asn
          275         280         285
Pro Phe Ile Asn Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Lys
          290         295         300
Arg Gly Leu Arg Trp Arg Ala Ala Pro Gln Glu Ala Trp Arg Ala
305         310         315

```

<210> 2549

<211> 158

<212> PRT

<213> Unknown (2564509-dir-0-6 conceptual translation of range 1-474)

<400>2549

```

Ile Cys Ser Pro Leu His Tyr Gly Met Val Met Ser Arg Arg Met Cys
 1           5           10           15
Phe Cys Leu Val Ala Ile Ser Trp Leu Val Ile Ala Val His Ser Val
          20          25          30
Leu His Ser Val Leu Thr Ser Arg Leu Ser Phe Cys Gly Ser Asn Gln
          35          40          45
Ile His His Phe Phe Cys Asp Met Thr Pro Leu Leu Lys Leu Ser Cys
          50          55          60

```

Ser Asp Thr Ser Val Asn Glu Leu Val Ile Phe Ile Glu Gly Pro Phe
65 70 75 80
Ser Val Ala Val Pro Leu Gly Ile Val Leu Val Ser Tyr Val Arg Ile
85 90 95
Ile Ser Ala Ile Leu Lys Ile Arg Ser Pro Glu Gly Arg His Arg Ala
100 105 110
Phe Ser Thr Cys Ser Ser His Leu Met Val Val Ile Leu Tyr Phe Gly
115 120 125
Thr Ile Ile Phe Met Tyr Phe Arg Pro Thr Ser Ser Tyr Ser Leu Asp
130 135 140
Tyr Asp Arg Val Val Ser Val Met Tyr Thr Val Val Ala Pro
145 150 155

<210> 2550

<211> 156

<212> PRT

<213> Unknown (2564511-dir-0-6 conceptual translation of range 1-468)

<400>2550

Asn Pro Leu His Tyr Thr Thr Val Met Ser Lys Lys Val Cys Leu Leu
1 5 10 15
Leu Val Gly Met Leu Trp Leu Trp Ala Val Leu Tyr Ser Leu Met His
20 25 30
Ile Val Leu Ile Ser Arg Leu Ser Phe Cys Gly Ser Asn Gln Ile Asn
35 40 45
His Phe Val Cys Asp Thr Val Pro Leu Phe Lys Leu Ser Cys Ser Asp
50 55 60
Thr Ser Thr Asn Gln Leu Val Ile Phe Thr Val Gly Ser Leu Ile Val
65 70 75 80
Met Val Pro Phe Leu Ile Val Leu Ile Ser Tyr Ala Arg Ile Val Phe
85 90 95
Ala Ile Leu Lys Ile Ser Ser Thr Asp Gly Arg Arg Lys Thr Phe Ser
100 105 110
Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Tyr Phe Gly Thr Ile
115 120 125
Met Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Thr Lys Asp
130 135 140
Arg Val Ala Ser Val Met Tyr Thr Val Leu Ala Pro
145 150 155

<210> 2551

<211> 158

<212> PRT

<213> Unknown (2564513-dir-0-6 conceptual translation of range 1-474)

<400>2551

Ile Cys Asp Pro Leu Arg Tyr Thr Val Val Met Ser Lys Arg Ile Cys
1 5 10 15
Leu Gln Met Val Ala Gly Ser Trp Val Leu Val Ser Leu His Ser Leu
20 25 30
Leu His Thr Val Leu Thr Ala Arg Leu Ser Phe Cys Gly Arg Asn Leu
35 40 45
Ile Arg His Phe Phe Cys Glu Met Ser Pro Leu Phe Ala Leu Ser Cys
50 55 60
Ser Asp Thr Thr Thr Asn Glu Leu Val Ile Phe Thr Glu Gly Ser Phe
65 70 75 80
Ser Leu Ala Leu Pro Phe Leu Leu Ile Leu Phe Ser Tyr Leu Arg Ile
85 90 95
Leu Ser Thr Val Leu Arg Ile Arg Ser Val Asp Gly Lys Cys Arg Ala
100 105 110
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Leu Phe Tyr Gly

```

      115              120              125
Thr Leu Phe Ser Val Tyr Phe Arg Pro Ser Ser Ser His Ser Leu Asp
      130              135              140
Asn Asp Arg Val Val Ser Ile Met Tyr Thr Ala Ile Thr Pro
      145              150              155

```

<210> 2552

<211> 315

<212> PRT

<213> Unknown (4808260-rev-1059-13 conceptual translation of range 106061-107005)

<220>

<221> VARIANT

<222> (1)...(315)

<223> Xaa = Any Amino Acid

<400>2552

```

Cys Leu Leu Ser Glu Val Met Leu Asn Thr Thr Ser Val Thr Glu Phe
 1              5              10              15
Leu Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Gln Pro Phe Leu Phe
      20              25              30
Val Val Phe Leu Thr Ile Tyr Phe Ile Ser Val Thr Gly Asn Gly Ala
      35              40              45
Val Leu Met Ile Val Ile Ser Asp Pro Arg Leu His Ser Leu Met Tyr
      50              55              60
Phe Phe Leu Gly Asn Leu Ser Tyr Leu Asp Ile Cys Tyr Ser Thr Val
      65              70              75              80
Thr Leu Pro Lys Met Leu Gln Asn Phe Leu Ser Thr His Lys Ala Ile
      85              90              95
Ser Phe Leu Gly Cys Ile Ser Gln Leu His Phe Phe His Phe Leu Gly
      100              105              110
Ser Thr Glu Ser Met Leu Phe Ala Val Met Ala Phe Asp Leu Ser Val
      115              120              125
Ala Ile Cys Lys Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Gln Leu
      130              135              140
Cys Thr Gln Met Ala Ile Thr Ile Trp Val Ile Gly Phe Phe His Ala
      145              150              155              160
Leu Leu His Ser Val Met Thr Ser Arg Leu Asn Phe Cys Gly Ser Asn
      165              170              175
Arg Ile His His Phe Leu Cys Asp Ile Lys Pro Leu Leu Lys Leu Ala
      180              185              190
Cys Gly Asn Thr Glu Leu Asn Gln Trp Leu Leu Ser Thr Val Thr Gly
      195              200              205
Thr Ile Ala Met Gly Pro Phe Phe Leu Thr Leu Leu Ser Tyr Phe Tyr
      210              215              220
Ile Ile Thr Tyr Leu Phe Lys Thr Arg Ser Cys Ser Met Leu Cys
      225              230              235              240
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Phe
      245              250              255
Tyr Ala Pro Val Leu Phe Thr Tyr Ile His Pro Ala Leu Glu Ser Phe
      260              265              270
Met Asp Gln Asp Arg Ile Val Ala Ile Met Tyr Thr Val Val Thr Pro
      275              280              285
Val Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly
      290              295              300
Ala Leu Gly Arg Val Ile Arg Arg Leu Xaa Phe
      305              310              315

```

<210> 2553

<211> 162

<212> PRT

<213> Unknown (1617234-dir-0-6 conceptual translation of range 1-486)

<400>2553

```

Asn Ala Ile Cys Asn Pro Leu Leu Tyr Asn Thr Ile Met Asn Lys Arg
 1           5           10           15
Thr Cys Val Ile Leu Ile Val Gly Ser Trp Leu Ile Ala Ser Ile Asn
      20           25           30
Ser Leu Ile His Thr Ile Leu Thr Phe Met Leu Pro Phe Cys Gly Ser
      35           40           45
Asn Ala Ile Asp Ser Phe Phe Cys Asp Met Pro Pro Leu Leu Lys Leu
      50           55           60
Ala Cys Thr Asp Thr Leu Val Asn Gln Ile Val Ile Phe Val Thr Gly
      65           70           75           80
Ser Cys Ile Ile Ala Gly Pro Phe Met Leu Thr Val Phe Ser Tyr Val
      85           90           95
Gln Ile Ile Ser Thr Ile Val Ser Ile Arg Ser Ser Ser Arg Lys Lys
      100          105          110
Lys Ala Phe Ser Thr Cys Thr Ser His Ile Thr Ala Val Val Ile Phe
      115          120          125
Tyr Val Pro Ser Ile Cys Ile Tyr Phe Arg Pro Lys Ser Asn Gln Ala
      130          135          140
Met Ile Gln Asp Lys Met Ala Thr Val Ile Cys Ala Val Ile Thr Pro
      145          150          155          160
Leu Leu

```

<210> 2554

<211> 160

<212> PRT

<213> Unknown (4877310-dir-0-6 conceptual translation of range 2-481)

<400>2554

```

Ala Ala Ile Cys Lys Pro Leu His Tyr Asn Thr Ile Met Asn Lys Arg
 1           5           10           15
Leu Cys Val Cys Leu Ala Leu Gly Cys Trp Gly Val Gly Val Ile Asn
      20           25           30
Ser Thr Ile His Val Phe Phe Thr Phe Gln Leu Pro Phe Cys Arg Ser
      35           40           45
Arg His Ile Asn His Phe Phe Cys Glu Val Pro Pro Phe Phe Arg Leu
      50           55           60
Ser Cys Gln Asp Thr Trp Phe Asn Glu Leu Ala Met Tyr Ile Ser Ala
      65           70           75           80
Cys Ile Ile Ala Ile Cys Ala Phe Phe Leu Thr Leu Ile Ser Tyr Ile
      85           90           95
Tyr Ile Ile Ser Ser Ile Ala Lys Ile Arg Ala Pro Gln Gly Arg Tyr
      100          105          110
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ala Val Tyr
      115          120          125
Tyr Gly Thr Ile Met Phe Ile Tyr Leu His Pro His Ser Ala Tyr Ser
      130          135          140
Pro Glu Met Gly Lys Ile Val Ser Ile Ile Tyr Thr Ser Val Thr Pro
      145          150          155          160

```

<210> 2555

<211> 160

<212> PRT

<213> Unknown (4877337-dir-0-6 conceptual translation of range 2-481)

<400>2555

```

Ile Cys Ser Pro Leu Leu Tyr Phe Thr Lys Met Ser Thr Arg Val Tyr

```


| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Val Gln Leu Leu Thr Val Ala Tyr Val Gly Gly Phe Leu Asn Ala Cys | | | |
| 20 | 25 | 30 | |
| Ser Phe Thr Ile Cys Phe Tyr Tyr Leu Leu Leu Cys Gly Pro Asn Arg | | | |
| 35 | 40 | 45 | |
| Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Val Glu Phe Ser Cys | | | |
| 50 | 55 | 60 | |
| Ser Asp Ile Ser Ile Pro Ala Val Val Pro Ser Phe Thr Ala Gly Ser | | | |
| 65 | 70 | 75 | 80 |
| Ile Ile Val Val Thr Val Ile Val Ile Ala Ile Ser Tyr Ile Tyr Ile | | | |
| 85 | 90 | 95 | |
| Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly His His Lys Ala | | | |
| 100 | 105 | 110 | |
| Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly | | | |
| 115 | 120 | 125 | |
| Thr Ile Thr Leu Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp | | | |
| 130 | 135 | 140 | |
| Gln Asn Lys Val Val Cys Val Phe Tyr Thr Val Val Ile Pro Met Leu | | | |
| 145 | 150 | 155 | 160 |

<210> 2556

<211> 315

<212> PRT

<213> Unknown (4680263-dir-1-12 conceptual translation of range 259-1203)

<220>

<221> VARIANT

<222> (1)...(315)

<223> Xaa = Any Amino Acid

<400>2556

| | | | |
|---|-----|-----|-----|
| Glu Met Glu Pro Gly Asn Tyr Thr Val Val Thr Glu Phe Ile Leu Leu | | | |
| 1 | 5 | 10 | 15 |
| Gly Leu Thr Asp Ile Thr Val Ser Val Ile Leu Phe Val Met Phe | | | |
| 20 | 25 | 30 | |
| Leu Ile Val Tyr Ser Val Thr Leu Met Gly Asn Leu Asn Ile Ile Val | | | |
| 35 | 40 | 45 | |
| Leu Ile Arg Thr Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu | | | |
| 50 | 55 | 60 | |
| Ser His Leu Ala Phe Leu Asp Ile Gly Tyr Ser Ser Val Thr Pro | | | |
| 65 | 70 | 75 | 80 |
| Ile Met Leu Arg Gly Phe Leu Arg Lys Gly Thr Phe Ile Pro Val Ala | | | |
| 85 | 90 | 95 | |
| Gly Cys Val Ala Gln Leu Cys Ile Val Val Ala Phe Gly Thr Ser Glu | | | |
| 100 | 105 | 110 | |
| Ser Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys | | | |
| 115 | 120 | 125 | |
| Ser Pro Leu Leu Tyr Ser Thr Gln Met Ser Ser Thr Val Cys Ile Leu | | | |
| 130 | 135 | 140 | |
| Leu Val Gly Thr Ser Tyr Leu Gly Gly Trp Val Asn Ala Trp Ile Phe | | | |
| 145 | 150 | 155 | 160 |
| Thr Gly Cys Ser Leu Asn Leu Ser Phe Cys Gly Pro Asn Lys Ile Asn | | | |
| 165 | 170 | 175 | |
| His Phe Phe Cys Asp Tyr Ser Pro Leu Leu Lys Leu Ser Cys Ser His | | | |
| 180 | 185 | 190 | |
| Asp Phe Ser Phe Glu Val Ile Pro Ala Ile Ser Ser Gly Ser Ile Ile | | | |
| 195 | 200 | 205 | |
| Val Val Thr Val Phe Ile Ile Ala Leu Ser Tyr Val Tyr Ile Leu Val | | | |
| 210 | 215 | 220 | |
| Ser Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser | | | |
| 225 | 230 | 235 | 240 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Cys | Thr | Ser | His | Leu | Thr | Ala | Val | Thr | Leu | Phe | Phe | Gly | Thr | Ile |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Thr | Phe | Ile | Tyr | Val | Met | Pro | Gln | Ser | Ser | Tyr | Ser | Thr | Asp | Gln | Asn |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Lys | Val | Val | Ser | Val | Phe | Tyr | Thr | Val | Val | Ile | Pro | Met | Leu | Asn | Pro |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Leu | Ile | Tyr | Ser | Phe | Arg | Asn | Lys | Glu | Val | Lys | Glu | Ala | Met | Lys | Lys |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Leu | Ile | Ala | Lys | Thr | His | Trp | Trp | Ser | Xaa | Asn | | | | | |
| 305 | | | | | 310 | | | | | 315 | | | | | |

<210> 2557

<211> 312

<212> PRT

<213> Unknown (1246533-dir-0-11 conceptual translation of range 1-936)

<400>2557

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Glu | Gly | Asn | His | Thr | Leu | Ala | Ser | Glu | Phe | Ile | Leu | Val | Gly |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Leu | Ser | Asp | His | Pro | Lys | Met | Lys | Ala | Leu | Phe | Val | Val | Phe | Leu | |
| | | | 20 | | | | | 25 | | | | 30 | | | |
| Leu | Ile | Tyr | Val | Ile | Thr | Phe | Gln | Gly | Asn | Leu | Gly | Ile | Ile | Ile | Leu |
| | | 35 | | | | 40 | | | | | 45 | | | | |
| Ile | Gln | Gly | Asp | Pro | Arg | Leu | His | Thr | Ser | Met | Tyr | Phe | Phe | Leu | Ser |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Ser | Leu | Ser | Val | Val | Asp | Ile | Cys | Phe | Ser | Ser | Val | Ile | Ala | Pro | Arg |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Thr | Leu | Val | Asn | Phe | Leu | Ser | Glu | Arg | Arg | Thr | Ile | Ser | Phe | Thr | Gly |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Cys | Thr | Gly | Gln | Thr | Phe | Phe | Tyr | Ile | Val | Phe | Val | Thr | Thr | Glu | Cys |
| | | | 100 | | | | | 105 | | | | 110 | | | |
| Phe | Leu | Leu | Ala | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Asn |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Pro | Leu | Leu | Tyr | Ser | Thr | Ile | Met | Thr | Arg | Arg | Gln | Cys | Met | Gln | Leu |
| | 130 | | | | | 135 | | | | 140 | | | | | |
| Val | Val | Gly | Ser | Tyr | Ile | Gly | Gly | Ile | Leu | Asn | Ala | Ile | Ile | Gln | Thr |
| 145 | | | | | 150 | | | | 155 | | | | | 160 | |
| Thr | Phe | Ile | Ile | Arg | Leu | Pro | Phe | Cys | Gly | Ser | Asn | Ile | Ile | Asn | His |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Phe | Phe | Cys | Asp | Val | Pro | Pro | Leu | Leu | Ala | Leu | Ser | Leu | Ala | Ser | Thr |
| | | | 180 | | | | 185 | | | | 190 | | | | |
| Tyr | Ile | Ser | Glu | Met | Ile | Leu | Phe | Ser | Leu | Ala | Gly | Ile | Ile | Glu | Leu |
| | 195 | | | | | 200 | | | | | 205 | | | | |
| Ser | Thr | Val | Thr | Ser | Ile | Leu | Val | Ser | Tyr | Ile | Phe | Ile | Ser | Cys | Ala |
| | 210 | | | | | 215 | | | | 220 | | | | | |
| Ile | Leu | Arg | Ile | Arg | Ser | Ala | Glu | Gly | Arg | Gln | Lys | Ala | Leu | Ser | Thr |
| 225 | | | | | 230 | | | | 235 | | | | | 240 | |
| Cys | Ala | Ser | His | Leu | Thr | Ala | Val | Thr | Leu | Leu | Tyr | Gly | Thr | Thr | Ile |
| | | | 245 | | | | | 250 | | | | | 255 | | |
| Phe | Thr | Tyr | Leu | Arg | Pro | Ser | Ser | Ser | Tyr | Ser | Leu | Asn | Thr | Asp | Lys |
| | | 260 | | | | | 265 | | | | | 270 | | | |
| Val | Val | Ser | Val | Phe | Tyr | Thr | Val | Val | Ile | Pro | Met | Leu | Asn | Pro | Leu |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Gln | Glu | Val | Lys | Gly | Ala | Leu | Ser | Arg | Val |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Val | Glu | Arg | Ile | Thr | Val | Arg | Val | | | | | | | | |
| 305 | | | | | 310 | | | | | | | | | | |

<210> 2558

<211> 313

<212> PRT

<213> Unknown (p28-dir-0-11 conceptual translation of range 1-939)

<400>2558

```

Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Cys Phe Leu Leu Gly
 1           5           10           15
Phe Ser Glu Gln Leu Glu Glu Gln Lys Pro Leu Phe Gly Ser Phe Leu
      20           25           30
Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Leu Val
      35           40           45
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
      50           55           60
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
      65           70           75           80
Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
      85           90           95
Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
      100           105           110
Phe Leu Leu Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys His
      115           120           125
Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Ile Phe Leu
      130           135           140
Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
      145           150           155           160
Leu Leu Met Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His
      165           170           175
Phe Phe Cys Asp Ile Asn Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
      180           185           190
Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
      195           200           205
Ile Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr
      210           215           220
Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
      225           230           235           240
Cys Ser Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
      245           250           255
Cys Val Asp Phe Ser Ser Pro Ser Thr His Ser Ala Gln Lys Asp Thr
      260           265           270
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
      275           280           285
Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
      290           295           300
Ile Trp Val Arg Lys Ile His Ser Pro
      305           310

```

<210> 2559

<211> 117

<212> PRT

<213> Unknown (2695895-dir-0-5 conceptual translation of range 2-351)

<220>

<221> VARIANT

<222> (1)...(117)

<223> Xaa = Any Amino Acid

<400>2559

```

Asp Leu Cys Tyr Ser Thr Val Ile Ala Pro Lys Ala Leu Ala Ile Phe
 1           5           10           15
Leu Ser Lys Asp Lys Lys Ile Ser Tyr Asn Gly His Ala Ala Xaa Phe
      20           25           30
Tyr Phe Leu Cys Cys Val Gly Thr Glu Gly Leu Leu Leu Ala Val Met
      35           40           45

```

Ala Tyr Asp His Phe Ser Ala Phe Cys Ser Pro Phe Leu Tyr Pro Val
 50 55 60
 Arg Met Ser Gln Gln Val Cys Val His Leu Val Ile Gly Ser Tyr Ile
 65 70 75 80
 Cys Gly Gly Ile Asn Ser Met Val Gln Thr Gly Phe Thr Phe Ser Leu
 85 90 95
 Asn Phe Cys Gly Glu Asn Xaa Leu Asp His Phe Phe Cys Asp Val Pro
 100 105 110
 Ala Leu Ile Lys Ile
 115

<210> 2560

<211> 216

<212> PRT

<213> Unknown (2921661-dir-0-8 conceptual translation of range 2-649)

<400>2560

Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys Met Leu Ala
 1 5 10 15
 Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly Cys Leu Leu
 20 25 30
 Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala Phe Leu Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys His Pro Leu His
 50 55 60
 Tyr Ile Leu Ile Met Ser Pro Gly Leu Arg Ile Phe Leu Val Ser Ala
 65 70 75 80
 Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr Leu Leu Met
 85 90 95
 Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His Phe Leu Cys
 100 105 110
 Asp Ile Asn Pro Leu Leu Gly Leu Ser Cys Thr Asp Pro Phe Thr Asn
 115 120 125
 Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu Ile Cys Val
 130 135 140
 Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr Ile Leu Lys
 145 150 155 160
 Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser
 165 170 175
 His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe Cys Val Asp
 180 185 190
 Phe Ser Ser Pro Ser Thr His Ser Ala Gln Lys Asp Thr Val Ala Ser
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 2561

<211> 313

<212> PRT

<213> Unknown (p19-dir-0-11 conceptual translation of range 1-939)

<400>2561

Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
 1 5 10 15
 Phe Ser Glu Gln Leu Glu Glu Gln Lys Ala Leu Phe Gly Ser Phe Leu
 20 25 30
 Phe Met Tyr Leu Val Met Val Ala Gly Asn Leu Leu Ile Ile Leu Val
 35 40 45
 Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| 65 | | | | | 70 | | | | | 75 | | | | 80 |
| Met | Leu | Ala | Asn | Ile | Gln | Ile | Gln | Ser | Gln | Ala | Ile | Ser | Tyr | Ser Gly |
| | | | | 85 | | | | | 90 | | | | | 95 |
| Cys | Leu | Leu | Gln | Leu | Tyr | Phe | Phe | Met | Leu | Phe | Val | Met | Leu | Glu Ala |
| | | | 100 | | | | | 105 | | | | | | 110 |
| Phe | Leu | Leu | Ala | Val | Met | Ala | Tyr | Asp | His | Tyr | Val | Ala | Ile | Cys His |
| | | | 115 | | | | | 120 | | | | | | 125 |
| Pro | Leu | His | Tyr | Ile | Leu | Ile | Met | Ser | Pro | Gly | Leu | Cys | Val | Phe Leu |
| | | | 130 | | | | 135 | | | | | 140 | | |
| Val | Ser | Ala | Ser | Trp | Ile | Met | Asn | Ala | Leu | Tyr | Ser | Leu | Leu | His Thr |
| | | | 145 | | | | 150 | | | | 155 | | | 160 |
| Leu | Leu | Met | Asn | Ser | Leu | Ser | Phe | Cys | Ala | Asn | His | Glu | Ile | Pro His |
| | | | 165 | | | | | | 170 | | | | | 175 |
| Phe | Phe | Cys | Asp | Ile | Asp | Pro | Leu | Leu | Ser | Leu | Ser | Cys | Ala | Asp Pro |
| | | | 180 | | | | | 185 | | | | | | 190 |
| Phe | Thr | Asn | Glu | Leu | Val | Ile | Phe | Ile | Thr | Gly | Gly | Leu | Thr | Gly Leu |
| | | | 195 | | | | | 200 | | | | | | 205 |
| Ile | Cys | Val | Leu | Cys | Leu | Ile | Ile | Ser | Tyr | Thr | Asn | Val | Phe | Ser Thr |
| | | | 210 | | | | 215 | | | | | 220 | | |
| Ile | Leu | Lys | Ile | Pro | Ser | Ala | Gln | Gly | Lys | Arg | Lys | Ala | Phe | Ser Thr |
| | | | 225 | | | 230 | | | | 235 | | | | 240 |
| Cys | Ser | Ser | His | Leu | Ser | Val | Val | Ser | Leu | Phe | Cys | Gly | Thr | Ser Phe |
| | | | 245 | | | | | | 250 | | | | | 255 |
| Cys | Val | Tyr | Phe | Ser | Pro | Pro | Ser | Thr | Arg | Ser | Ala | Gln | Lys | Asp Thr |
| | | | 260 | | | | | 265 | | | | | 270 | |
| Val | Ala | Ser | Val | Met | Tyr | Thr | Val | Val | Thr | Pro | Met | Leu | Asn | Pro Phe |
| | | | 275 | | | | 280 | | | | | 285 | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Gln | Glu | Ile | Lys | Ser | Ser | Leu | Arg | Lys Leu |
| | | | 290 | | | 295 | | | | | 300 | | | |
| Ile | Trp | Val | Arg | Lys | Ile | His | Ser | Pro | | | | | | |
| | | | 305 | | | 310 | | | | | | | | |

<210> 2562

<211> 313

<212> PRT

<213> Unknown (p40-dir-0-11 conceptual translation of range 1-938)

<400>2562

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----|
| Met | Glu | Gly | Lys | Asn | Leu | Thr | Ser | Ile | Ser | Glu | Phe | Phe | Leu | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Ser | Glu | Gln | Leu | Glu | Glu | Gln | Lys | Ala | Leu | Leu | Val | Ser | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Met | Tyr | Leu | Val | Thr | Val | Ala | Gly | Asn | Leu | Leu | Ile | Ile | Leu | Val |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Ile | Ile | Thr | Asp | Thr | Gln | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ala |
| | | | 50 | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Leu | Ala | Asp | Ala | Cys | Phe | Val | Ser | Thr | Thr | Val | Pro | Lys |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Met | Leu | Ala | Asn | Ile | Gln | Ile | Gln | Ser | Gln | Ala | Ile | Ser | Tyr | Ser Gly | |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Cys | Leu | Leu | Gln | Leu | Tyr | Phe | Phe | Met | Leu | Phe | Val | Met | Leu | Glu Ala | |
| | | | 100 | | | | | 105 | | | | | | 110 | |
| Phe | Leu | Leu | Ala | Val | Met | Ala | Tyr | Asp | His | Tyr | Val | Ala | Ile | Cys His | |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Pro | Leu | His | Tyr | Ile | Leu | Ile | Met | Ser | Pro | Gly | Leu | Cys | Val | Phe Leu | |
| | | | 130 | | | 135 | | | | | 140 | | | | |
| Val | Ser | Ala | Ser | Trp | Ile | Met | Asp | Ala | Leu | His | Ser | Leu | Leu | His Thr | |
| | | | 145 | | | 150 | | | | 155 | | | | 160 | |
| Leu | Leu | Met | Asn | Ser | Leu | Ser | Phe | Tyr | Ala | Asn | His | Glu | Thr | Pro His | |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Phe | Phe | Cys | Asp | Ile | Asp | Pro | Leu | Leu | Ser | Leu | Ser | Cys | Thr | Asp Pro | |

```
<210> 2563
<211> 161
<212> PRT
<213> Unknown (293757-dir-0-6 conceptual translation of range 2-484)
```

```
<210> 2564
<211> 313
<212> PRT
<213> Unknown (p39-dir-0-11 conceptual translation of range 1-939)
```

1558

Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
 65 70 75 80
 Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
 85 90 95
 Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
 100 105 110
 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
 115 120 125
 Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
 130 135 140
 Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
 145 150 155 160
 Leu Leu Met Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His
 165 170 175
 Phe Phe Cys Asp Ile Asp Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
 180 185 190
 Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
 195 200 205
 Val Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Ile Phe Ser Thr
 210 215 220
 Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
 245 250 255
 Cys Val Tyr Phe Ile Pro Pro Ser Thr Arg Ser Ala Gln Lys Asp Thr
 260 265 270
 Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
 290 295 300
 Ile Trp Val Arg Glu Ile His Ser Pro
 305 310

<210> 2565

<211> 315

<212> PRT

<213> Unknown (3738097-rev-723-12 conceptual translation of range 72448-73392)

<220>

<221> VARIANT

<222> (1)...(315)

<223> Xaa = Any Amino Acid

<400>2565

Met Leu Ala Arg Asn Asn Ser Leu Val Thr Glu Phe Ile Leu Ala Gly
 1 5 10 15
 Leu Thr Asp Arg Pro Glu Phe Trp Gln Pro Phe Phe Phe Leu Phe Leu
 20 25 30
 Val Ile Tyr Ile Val Thr Met Val Gly Asn Leu Gly Leu Ile Thr Leu
 35 40 45
 Phe Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
 50 55 60
 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Phe Thr Pro Lys
 65 70 75 80
 Met Leu Met Asn Phe Val Ser Lys Lys Asn Ile Ile Ser Asn Val Gly
 85 90 95
 Cys Met Thr Arg Leu Phe Phe Phe Leu Phe Phe Val Ile Ser Glu Cys
 100 105 110
 Tyr Met Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125

Pro Leu Leu Tyr Lys Val Thr Met Ser His Gln Val Cys Ser Met Leu
 130 135 140
 Thr Phe Ala Ala Tyr Ile Met Gly Leu Ala Gly Ala Thr Ala His Thr
 145 150 155 160
 Gly Cys Met Phe Arg Leu Thr Phe Cys Ser Ala Asn Ile Ile Asn His
 165 170 175
 Tyr Leu Cys Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr
 180 185 190
 Tyr Val Asn Glu Val Val Val Leu Ile Val Val Gly Thr Asn Ile Thr
 195 200 205
 Val Pro Ser Cys Thr Ile Leu Ile Ser Tyr Val Phe Ile Val Thr Ser
 210 215 220
 Ile Leu His Ile Lys Ser Thr Gln Gly Arg Ser Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Val Ile Ala Leu Ser Leu Phe Phe Gly Ser Ala Ala
 245 250 255
 Phe Met Tyr Ile Lys Tyr Ser Ser Gly Ser Met Glu Gln Gly Lys Val
 260 265 270
 Phe Ser Val Phe Tyr Thr Asn Val Val Pro Met Leu Asn Pro Leu Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Ala Leu
 290 295 300
 Ile Lys Ile Gln Arg Arg Asn Ile Phe Xaa Leu
 305 310 315

<210> 2566

<211> 313

<212> PRT

<213> Unknown (p41-dir-0-11 conceptual translation of range 1-938)

<400>2566

Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
 1 5 10 15
 Phe Ser Glu Gln Leu Glu Glu Gln Lys Ala Leu Phe Gly Ser Phe Leu
 20 25 30
 Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Ile Leu Val
 35 40 45
 Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
 50 55 60
 Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
 65 70 75 80
 Met Leu Ala Asn Ile Arg Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
 85 90 95
 Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
 100 105 110
 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
 115 120 125
 Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
 130 135 140
 Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
 145 150 155 160
 Leu Leu Met Asn Ser Leu Ser Phe Cys Thr Asn Arg Glu Ile Pro His
 165 170 175
 Phe Phe Cys Asp Ile Asn Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
 180 185 190
 Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Val Ala Gly Leu
 195 200 205
 Val Cys Val Leu Cys Leu Ile Ser Tyr Met Asn Val Phe Ser Thr
 210 215 220
 Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Ser Ser Phe Ser Thr
 225 230 235 240

Cys Ser Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
 245 250 255
 Cys Val Tyr Val Ser Pro Pro Ser Thr Leu Ser Ala Gln Lys Asp Thr
 260 265 270
 Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Thr Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Ile
 290 295 300
 Ile Trp Val Arg Lys Ile His Ser Pro
 305 310

<210> 2567

<211> 315

<212> PRT

<213> Unknown (2317703-dir-0-13 conceptual translation of range 211-1155)

<220>

<221> VARIANT

<222> (1)...(315)

<223> Xaa = Any Amino Acid

<400>2567

Met Ala Thr Gly Asn Tyr Cys Val Phe Pro Glu Phe Ile Leu Thr Gly
 1 5 10 15
 Leu Ser Lys Lys Ser Glu Leu Gln Met Pro Leu Phe Val Leu Phe Leu
 20 25 30
 Gly Ile Tyr Ile Val Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu
 35 40 45
 Ile Arg Leu Ser Ser Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
 50 55 60
 Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys
 65 70 75 80
 Met Leu Val Asn Phe Val Ala Glu Lys Asn Ile Ile Ser Tyr Thr Gly
 85 90 95
 Cys Met Thr Gln Leu Phe Phe Phe Leu Ile Phe Ala Ile Ala Glu Cys
 100 105 110
 His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125
 Pro Leu Leu Tyr Asn Ala Ile Met Ser Tyr Gln Ser Tyr Ile Ser Met
 130 135 140
 Ile Ser Gly Val Tyr Ile Ile Gly Val Val Cys Ala Ser Ala His Thr
 145 150 155 160
 Gly Phe Met Ile Arg Ser Gln Phe Cys Asn Leu Asp Val Ile Asn His
 165 170 175
 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Leu Ala His Ser Ser Thr
 180 185 190
 Tyr Val Asn Glu Leu Val Ile Leu Ile Cys Gly Thr Cys Asn Ile Val
 195 200 205
 Val Pro Thr Leu Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Thr
 210 215 220
 Ile Leu His Ile Arg Ser Thr Glu Gly Arg Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Ala Ala
 245 250 255
 Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
 260 265 270
 Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Thr Ala Leu Lys Lys Ile
 290 295 300
 Leu Glu Arg Lys Ser Phe Val Xaa Thr Glu Val

305

310

315

<210> 2568

<211> 114

<212> PRT

<213> Unknown (888-dir-0-5 conceptual translation of range 2-343)

<400>2568

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Cys | Lys | Pro | Leu | Leu | Tyr | Pro | Val | Ile | Met | Ser | Asn | Thr | Leu | Cys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ile | Arg | Leu | Leu | Val | Leu | Ser | Leu | Leu | Gly | Gly | Leu | Leu | His | Ala | Ile |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| Ile | His | Ser | Ser | Phe | Leu | Phe | Arg | Leu | Thr | Phe | Cys | Asp | Ser | Ile | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Val | His | His | Phe | Tyr | Cys | Asp | Ile | Ile | Pro | Leu | Leu | Lys | Ile | Thr | Cys |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Thr | Asp | Pro | Ser | Ile | Asn | Tyr | Leu | Ile | Val | Phe | Ile | Phe | Ala | Gly | Ser |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ile | Gln | Met | Phe | Thr | Ile | Leu | Ile | Val | Leu | Val | Ser | Tyr | Thr | Leu | Val |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Leu | Phe | Thr | Ile | Leu | Arg | Lys | Lys | Ser | Leu | Gln | Gly | Ile | Lys | Lys | Ala |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Ser | | | | | | | | | | | | | | |

<210> 2569

<211> 159

<212> PRT

<213> Unknown (1514485-dir-0-6 conceptual translation of range 2-478)

<400>2569

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ala | Ile | Cys | Asn | Pro | Leu | Leu | Tyr | Thr | Ile | Ser | Met | Pro | Lys | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Cys | Met | Lys | Leu | Val | Ala | Gly | Ser | Tyr | Leu | Gly | Gly | Val | Leu | Asn |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| Ser | Leu | Thr | Gln | Thr | Cys | Cys | Leu | Pro | Leu | Pro | Phe | Cys | Gly | Pro | |
| | | 35 | | | | | 40 | | | | 45 | | | | |
| Asn | Val | Ile | Asn | His | Tyr | Phe | Cys | Asp | Thr | Asn | Pro | Leu | Leu | Lys | Leu |
| | | 50 | | | | 55 | | | | 60 | | | | | |
| Thr | Cys | Ser | Asp | Gly | Arg | Leu | Asn | Glu | Leu | Leu | Leu | Val | Thr | Phe | Asn |
| 65 | | | | | 70 | | | | 75 | | | | | | 80 |
| Gly | Thr | Ile | Ser | Met | Thr | Val | Leu | Leu | Ile | Val | Ile | Ser | Tyr | Val | |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Tyr | Ile | Leu | Val | Ser | Ile | Leu | Ser | Ile | Arg | Ser | Ala | Arg | Gly | Arg | His |
| | | 100 | | | | | 105 | | | | | | 110 | | |
| Lys | Ala | Phe | Ser | Thr | Cys | Ala | Ser | His | Leu | Leu | Thr | Val | Thr | Leu | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Val | Pro | Ala | Gly | Leu | Ser | His | Met | Gln | Pro | Gly | Ser | Lys | Tyr | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Asp | Met | Glu | Lys | Val | Thr | Ala | Val | Phe | Tyr | Thr | Leu | Leu | Val | |
| 145 | | | | | 150 | | | | | 155 | | | | | |

<210> 2570

<211> 131

<212> PRT

<213> Unknown (1514487-dir-0-5 conceptual translation of range 2-394)

<400>2570

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ala | Ile | Cys | Ser | Pro | Leu | Leu | Tyr | Ser | Thr | Val | Met | Thr | Lys | Arg |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Cys | Met | Gln | Leu | Val | Val | Gly | Ser | Tyr | Met | Gly | Gly | Leu | Leu | Asn |

```
<210> 2571
<211> 114
<212> PRT
<213> Unknown (32508-dir-0-5 conceptual translation of range 2-343)
```

```
<210> 2572
<211> 315
<212> PRT
<213> Unknown (p42-dir-0-11 conceptual translation of range 1-945)
```

1563

```

Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
 130          135          140
Gly Met Leu Val Ala Val Ser Trp Thr Cys Ala Phe Thr Asn Ala Leu
145          150          155          160
Thr His Thr Ile Ala Leu Thr Thr Leu Asn Phe Cys Gly Pro Ser Val
          165          170          175
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
          180          185          190
Ser Ser Thr Gln Leu Asn Glu Leu Leu Phe Val Ala Ala Ala Phe
          195          200          205
Met Ala Val Val Pro Leu Val Leu Ile Ser Val Ser Tyr Ala His Val
          210          215          220
Val Ala Ala Val Leu Gln Ile His Ser Ala Glu Gly Arg Lys Lys Ala
225          230          235          240
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
          245          250          255
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ser Ser Asp
          260          265          270
Lys Asp Lys Gly Val Gly Val Phe Met Thr Val Ile Asn Pro Met Leu
          275          280          285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Asp Val Gln Gly Ala Leu
          290          295          300
Trp Gln Leu Leu Val Gly Lys Arg Ser Leu Thr
305          310          315

```

<210> 2573

<211> 315

<212> PRT

<213> Unknown (p176-dir-0-11 conceptual translation of range 1-945)

<400>2573

```

Met Gln Pro Glu Ser Gly Ala Asn Gly Thr Val Ile Ala Glu Phe Ile
 1          5          10          15
Leu Leu Gly Leu Leu Glu Ala Pro Gly Leu Gln Pro Val Val Phe Val
          20          25          30
Leu Phe Leu Phe Ala Tyr Leu Val Thr Val Gly Gly Asn Leu Ser Ile
          35          40          45
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Ser Pro Met Tyr Phe
          50          55          60
Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Ser Val Thr
          65          70          75          80
Val Pro Ser Met Leu Ser Arg Leu Leu Ser Arg Lys Arg Ala Val Pro
          85          90          95
Cys Gly Ala Cys Leu Thr Gln Leu Phe Phe His Leu Phe Val Gly
          100          105          110
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
          115          120          125
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
          130          135          140
Arg Met Leu Val Ala Ala Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu
145          150          155          160
Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Glu
          165          170          175
Val Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
          180          185          190
Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Ala Val Gly Phe Ile
          195          200          205
Met Ala Gly Thr Pro Met Ala Leu Ile Val Ile Ser Tyr Ile His Val
          210          215          220
Ala Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
225          230          235          240

```

Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Met Phe Tyr Gly
 245 250 255
 Ser Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
 260 265 270
 Lys Asp Lys Ala Val Gly Ile Phe Asn Thr Val Ile Asn Pro Met Val
 275 280 285
 Asn Pro Ile Ile Tyr Arg Phe Arg Asn Pro Glu Val Gln Ser Ala Ile
 290 295 300
 Trp Arg Met Leu Thr Gly Arg Arg Ser Leu Ala
 305 310 315

<210> 2574

<211> 162

<212> PRT

<213> Unknown (1552397-dir-0-6 conceptual translation of range 1-486)

<400>2574

Val Ala Val Cys His Pro Leu Leu Tyr Val Phe His Met Ser Gln Lys
 1 5 10 15
 His Cys Thr Phe Phe Val Ser Ala Ala Trp Ile Ile Gly Phe Leu Asp
 20 25 30
 Pro Thr Ser Tyr Val Val Leu Ile Ser Lys Phe Ser Phe Cys Thr Ser
 35 40 45
 Asn Ile Ile Asp His Phe Phe Cys Asp Leu Ala Pro Leu Leu Lys Leu
 50 55 60
 Ser Cys Ser Asp Thr Phe Gln Ile Glu Val Leu Asn Tyr Val Glu Ser
 65 70 75 80
 Ala Leu Val Thr Leu Asn Ser Phe Val Leu Thr Val Ile Ser Tyr Ile
 85 90 95
 Phe Thr Ile Ser Ala Ile Leu Asn Ile Lys Ser Ala Glu Gly Arg His
 100 105 110
 Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
 115 120 125
 Tyr Ser Thr Ile Ile Ser Leu Tyr Ile Arg Pro Ile Ser Thr Tyr Ala
 130 135 140
 Pro Lys Gln Asp Gln Phe Phe Ala Leu Leu Tyr Ile Val Leu Ile Pro
 145 150 155 160
 Leu Leu

<210> 2575

<211> 161

<212> PRT

<213> Unknown (1552399-dir-0-6 conceptual translation of range 1-483)

<400>2575

Val Ala Ile Cys Tyr Pro Leu His Tyr Ala Leu Arg Met Ser Leu Lys
 1 5 10 15
 His Cys Ala Lys Ile Ile Val Gly Val Trp Val Ala Gly Phe Leu Ala
 20 25 30
 Pro Val Ile His Thr Val Leu Met Thr Asn Leu Ser Phe Cys Ser Ser
 35 40 45
 Asn His Ile Asn His Phe Leu Cys Asp Leu Thr Pro Val Leu Lys Ile
 50 55 60
 Ser Cys Ser Asp Thr Ser Leu Ile Glu Met Ile Thr Tyr Ile Asp Gly
 65 70 75 80
 Val Ile Val Ala Phe Ser Thr Phe Thr Ile Thr Ser Val Ser Tyr Val
 85 90 95
 Phe Ile Leu Phe Lys Ile Leu Lys Ile His Ser Ser Gln Gly Lys Lys
 100 105 110
 Lys Ala Leu Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 115 | | | | | 120 | | | | 125 | | | | | |
| Tyr | Gly | Ser | Ile | Ile | Cys | Leu | Tyr | Met | Arg | Pro | Thr | Lys | Ser | Ile | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Pro | Asn | Gln | Asp | Val | Phe | Ala | Leu | Leu | Tyr | Ala | Val | Leu | Val | Pro | Met |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Leu | | | | | | | | | | | | | | | |

<210> 2576

<211> 160

<212> PRT

<213> Unknown (4877302-dir-0-6 conceptual translation of range 2-481)

<400>2576

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ala | Ile | Cys | Asn | Pro | Leu | Arg | Tyr | Thr | Ser | Ile | Ile | Ser | Thr | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Cys | Ile | Leu | Leu | Ala | Ala | Leu | Arg | Trp | Ser | Val | Gly | Phe | Val | Cys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Leu | Pro | Cys | Thr | Val | Leu | Leu | Leu | Arg | Leu | Ser | Phe | Cys | Gly | Pro |
| | | | 35 | | | | | 40 | | | | | 45 | | |
| Lys | Glu | Ile | Tyr | His | Tyr | Tyr | Cys | Asp | His | Pro | Gln | Ile | Leu | Lys | Val |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ala | Cys | Asn | Asp | Thr | Ser | Leu | Asn | Tyr | Tyr | Val | Ser | Leu | Tyr | Val | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ala | Val | Val | Ile | Val | Val | Pro | Phe | Leu | Phe | Ile | Leu | Ser | Thr | Tyr | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Ile | Leu | Arg | Ala | Val | Leu | Lys | Ile | Arg | Ser | Ala | Glu | Gly | Arg | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Lys | Thr | Phe | Ser | Thr | Cys | Ser | Ser | His | Leu | Val | Cys | Val | Val | Ile | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Leu | Ser | Ala | Gly | Phe | Ala | Tyr | Phe | Arg | Pro | Gln | Glu | Thr | Ser | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ser | Asp | Tyr | Ser | Ile | Met | Ala | Ser | Leu | Leu | Tyr | Ser | Thr | Leu | Ser | Pro |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

<210> 2577

<211> 153

<212> PRT

<213> Unknown (2564501-dir-0-6 conceptual translation of range 1-459)

<400>2577

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Pro | Leu | His | Tyr | Met | Thr | Ile | Met | Ser | His | Arg | Thr | Cys | Gly | Leu |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Leu | Val | Ala | Ala | Ser | Trp | Val | Gly | Gly | Ser | Ile | His | Ser | Leu | Leu | Gln |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Leu | Leu | Leu | Ala | Trp | Leu | Pro | Tyr | Cys | Gly | Pro | Asn | Met | Ile | Asp |
| | | | 35 | | | | | 40 | | | | | 45 | | |
| Ser | Phe | Phe | Cys | Asp | Ala | Pro | Leu | Leu | Lys | Leu | Ala | Cys | Thr | Asp | |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Thr | Thr | Leu | Val | Gly | Trp | Leu | Ile | Leu | Cys | Asn | Gly | Gly | Leu | Ile | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Val | Cys | Ser | Phe | Ser | Val | Leu | Val | Thr | Ser | Tyr | Thr | Phe | Ile | Ile | Arg |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Thr | Pro | Arg | Thr | Gln | Leu | Ile | Glu | Gly | Lys | Arg | Arg | Ala | Leu | Ser | Thr |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Cys | Gly | Ser | His | Cys | Ile | Val | Val | Val | Phe | Phe | Phe | Gly | Pro | Cys | Ile |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Ile | Tyr | Leu | Arg | Pro | Ser | Ile | Ser | Ile | Phe | Leu | Asp | Lys | Val | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ser | Val | Phe | Tyr | Thr | Leu | Ile | Thr | Pro | | | | | | | |
| 145 | | | | | 150 | | | | | | | | | | |

<210> 2578

<211> 152

<212> PRT

<213> Unknown (2564499-dir-0-6 conceptual translation of range 1-456)

<400>2578

```

Asn Pro Leu Arg Tyr Thr Thr Ile Met Ser Arg Lys Val Cys Ser Leu
 1           5           10           15
Leu Val Leu Ala Cys Trp Val Gly Gly Ala Val His Ser Thr Ala Gln
          20           25           30
Val Leu Leu Val Met Thr Leu Pro Phe Cys Gly Pro Asn Glu Val Gly
          35           40           45
His Phe Phe Cys Asp Ile Pro Pro Leu Phe Pro Leu Val Cys Thr Asp
          50           55           60
Thr Phe Leu Ser Gly Val Leu Ile Met Ser Asn Ser Gly Leu Ile Ser
          65           70           75           80
Leu Ala Cys Phe Leu Thr Leu Ile Ile Ser Tyr Thr Leu Ile Leu Leu
          85           90           95
Ala Val Arg Arg Cys Ser Ala Glu Gly Lys Ser Lys Ala Leu Ser Thr
          100          105          110
Cys Gly Thr His Leu Thr Val Val Thr Ile Ala Phe Gly Pro Ser Ile
          115          120          125
Phe Ile Tyr Met Lys Pro Met Asn Leu Gln Val Asp Lys Ile Val Ala
          130          135          140
Leu Phe Phe Val Ile Ile Thr Pro
          145          150

```

<210> 2579

<211> 205

<212> PRT

<213> Unknown (hg449-dir-0-7 conceptual translation of range 1-616)

<220>

<221> VARIANT

<222> (1)...(205)

<223> Xaa = Any Amino Acid

<400>2579

```

Leu Met Glu Ile Ser Tyr Phe Thr Val Val Pro Lys Phe Ile Thr Asp
 1           5           10           15
Leu Leu Ala Lys Ile Lys Ala Ile Ser Leu Glu Gly Tyr Leu Ala Gln
          20           25           30
Ile Phe Leu His Phe Cys Gly Ile Pro Trp Ile Phe Leu Leu Pro Leu
          35           40           45
Met Thr Asn Asp Gln Tyr Met Ala Asn Cys Lys Leu Tyr Tyr Tyr Thr
          50           55           60
Thr Ile Met Ser Cys Arg Val Cys His Leu Leu Val Ala Gly Phe Trp
          65           70           75           80
Leu Arg Gly Ile Ile His Ser Met Val Gln Ile Leu Val Ser Val Gln
          85           90           95
Leu Phe Phe Cys Gly Pro Asn Met Ile Asp His Ser Phe Cys Asp Leu
          100          105          110
Gln Val Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Val Glu Gly Val
          115          120          125
Ile Val Leu Ala Asn Ser Glu Leu Val Ser Val Phe Phe Leu Ile Leu
          130          135          140
Val Ser Ser Tyr Ile Ile Ile Leu Val Asn Leu Arg Asn His Ser Ala
          145          150          155          160
Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Ala Ser Tyr Leu Val Phe
          165          170          175

```

Xaa Thr Cys Ile Phe Leu Tyr Val Xaa Leu Ser Ser Thr Phe Thr Lys
 180 185 190
 Asp Lys Leu Val Ala Val Phe Tyr Val Ile Ile Thr Pro
 195 200 205

<210> 2580

<211> 154

<212> PRT

<213> Unknown (902708-dir-0-6 conceptual translation of range 2-463)

<400>2580

Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Ser Arg Pro Val Cys
 1 5 10 15
 Ile Phe Leu Val Gly Ala Ala Val Ile Leu Gly Phe Ile His Gly Ala
 20 25 30
 Ile Gln Thr Leu Phe Met Ala Gln Leu Pro Phe Cys Gly Pro Asn Ile
 35 40 45
 Ile Asn His Phe Met Cys Asp Leu Ile Pro Leu Leu Glu Leu Ala Cys
 50 55 60
 Thr Asp Thr His Thr Leu Gly Pro Leu Ile Ala Ala Asn Ser Gly Ser
 65 70 75 80
 Leu Cys Leu Leu Thr Phe Ser Met Leu Val Val Ser Tyr Val Val Ile
 85 90 95
 Pro Arg Ser Leu Arg Asn His Ser Ser Glu Gly Arg Arg Lys Ala Leu
 100 105 110
 Ser Thr Cys Ala Ser His Val Thr Val Val Val Leu Phe Leu Val Pro
 115 120 125
 Cys Ser Tyr Leu Tyr Leu Arg Pro Met Thr Ser Phe Pro Thr Asn Lys
 130 135 140
 Ala Val Thr Val Phe Cys Thr Leu Val Thr
 145 150

<210> 2581

<211> 114

<212> PRT

<213> Unknown (32513-dir-0-5 conceptual translation of range 2-343)

<400>2581

Ile Cys Tyr Pro Leu Arg Tyr Thr Ala Ile Met Asn Pro Arg Ile Cys
 1 5 10 15
 Val Ala Leu Ala Val Gly Thr Trp Leu Leu Gly Cys Ile His Ser Ser
 20 25 30
 Ile Leu Thr Ser Leu Thr Phe Thr Leu Pro Tyr Cys Gly Pro Asn Glu
 35 40 45
 Val Asp His Phe Phe Cys Asp Ile Pro Ala Leu Leu Pro Leu Ala Cys
 50 55 60
 Ala Asp Thr Ser Leu Ala Gln Arg Val Ser Phe Thr Ser Val Gly Leu
 65 70 75 80
 Ile Ser Leu Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile
 85 90 95
 Thr Ile Ser Ile Leu Ser Ile Arg Thr Thr Glu Gly Arg Arg Arg Ala
 100 105 110
 Phe Ser

<210> 2582

<211> 114

<212> PRT

<213> Unknown (32516-dir-0-5 conceptual translation of range 2-343)

<400>2582


```

Ile Cys His Pro Leu Asn Tyr Pro Val Ile Met Asn Arg Gly Val Phe
 1           5           10           15
Met Lys Leu Val Ile Phe Ser Trp Ile Ser Gly Ile Met Val Ala Thr
          20           25           30
Val Gln Thr Thr Trp Val Phe Ser Phe Pro Phe Cys Gly Pro Asn Glu
          35           40           45
Ile Asn His Leu Phe Cys Glu Thr Pro Pro Val Leu Glu Leu Val Cys
 50           55           60
Ala Asp Thr Phe Leu Phe Glu Ile Tyr Ala Phe Thr Gly Thr Ile Leu
65           70           75           80
Ile Val Met Val Pro Phe Leu Leu Ile Leu Leu Ser Tyr Ile Arg Val
          85           90           95
Leu Phe Ala Ile Leu Lys Met Pro Ser Thr Thr Gly Arg Gln Lys Ala
          100          105          110
Phe Ser

```

<210> 2583

<211> 195

<212> PRT

<213> Unknown (2252615-dir-0-7 conceptual translation of range 1-586)

<400>2583

```

Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr
 1           5           10           15
Ser Cys Val Arg Pro Gln Met Leu Val His Leu Trp Gly Pro His Lys
          20           25           30
Thr Ile Ser Phe Leu Gly Cys Ala Val Gln Leu Phe Ile Phe Leu Leu
          35           40           45
Leu Gly Thr Thr Glu Cys Val Leu Leu Thr Val Met Ala Phe Asp Arg
 50           55           60
Tyr Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Met His Pro
65           70           75           80
Arg Leu Cys Arg Gln Leu Ala Ala Val Ala Trp Val Met Gly Leu Val
          85           90           95
Gln Ser Ile Val Gln Thr Pro Pro Thr Leu Arg Leu Pro Phe Cys Pro
          100          105          110
His Arg Gln Ile Asp Asp Phe Val Cys Gln Val Pro Ser Leu Ile Arg
          115          120          125
Leu Ser Cys Gly Asp Thr Thr Phe Asn Gly Ile Gln Leu Ala Val Ser
          130          135          140
Ser Val Val Phe Leu Val Val Pro Leu Ala Leu Ile Leu Ile Ser Tyr
          145          150          155          160
Gly Ala Ile Ala Arg Ala Val Leu Arg Ile Ser Ser Ala Thr Ala Trp
          165          170          175
Arg Lys Ala Leu Gly Thr Cys Ser Ser His Leu Ala Val Val Thr Leu
          180          185          190
Phe Tyr Ser
          195

```

<210> 2584

<211> 106

<212> PRT

<213> Unknown (3328023-dir-0-5 conceptual translation of range 1-318)

<400>2584

```

Thr Thr Glu Cys Val Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val
 1           5           10           15
Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Met His Pro Arg Leu
          20           25           30
Cys Arg Gln Leu Ala Ala Val Ala Trp Val Met Gly Leu Val Gln Ser

```

```
<210> 2585
<211> 194
<212> PRT
<213> Unknown (2828696-dir-0-7 conceptual translation of range 1-582)
```

```
<210> 2586
<211> 318
<212> PRT
<213> Unknown (4160199-rev-489-12 conceptual translation of range 49035-49987)
```

1570

| | | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400>2587 | | | | | | | | | | | | | | | | |
| Gln | Glu | Gln | Ala | Met | Asp | Asn | Gln | Ser | Ser | Thr | Pro | Gly | Phe | Leu | Leu | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Leu | Gly | Phe | Ser | Glu | His | Pro | Gly | Leu | Gly | Arg | Thr | Leu | Phe | Val | Asp | |
| | | | 20 | | | | | 25 | | | | | 30 | | | |
| Val | Ile | Thr | Ser | Tyr | Leu | Leu | Thr | Leu | Val | Gly | Asn | Thr | Leu | Ile | Ile | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Leu | Leu | Ser | Ala | Leu | Asp | Thr | Lys | Leu | His | Ser | Pro | Met | Tyr | Phe | Phe | |
| | 50 | | | | | 55 | | | | | 60 | | | | | |
| Leu | Ser | Asn | Leu | Ser | Phe | Leu | Asp | Leu | Cys | Phe | Thr | Thr | Ser | Cys | Val | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | |
| Pro | Gln | Met | Leu | Ala | Asn | Leu | Trp | Gly | Pro | Lys | Lys | Thr | Ile | Ser | Phe | |
| | | | | 85 | | | | | 90 | | | | | 95 | | |
| Leu | Asp | Cys | Ser | Val | Gln | Ile | Phe | Ile | Phe | Leu | Ser | Leu | Gly | Thr | Thr | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Glu | Cys | Ile | Leu | Met | Lys | Val | Met | Ala | Phe | Asp | Arg | Tyr | Val | Ala | Val | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Cys | Gln | Pro | Leu | His | Tyr | Ala | Thr | Ile | Ile | His | Pro | Arg | Leu | Cys | Trp | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Gln | Leu | Ala | Ser | Val | Ala | Trp | Val | Ile | Gly | Leu | Val | Gly | Ser | Val | Val | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Gln | Thr | Pro | Ser | Thr | Leu | His | Leu | Pro | Phe | Cys | Pro | Asp | Arg | Gln | Val | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Asp | Asp | Phe | Val | Cys | Glu | Val | Pro | Ala | Leu | Ile | Arg | Leu | Ser | Cys | Glu | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Asp | Thr | Ser | Tyr | Asn | Glu | Ile | Gln | Val | Ala | Val | Ala | Ser | Val | Phe | Ile | |

| | | |
|---|---------------------------------|-----------------|
| 195 | 200 | 205 |
| Leu Val Val Pro Leu Ser | Leu Ile Leu Val Ser Tyr | Gly Ala Ile Thr |
| 210 | 215 | 220 |
| Trp Ala Val Leu Arg Ile Asn Ser | Ala Thr Ala Trp Arg Lys Ala Phe | |
| 225 | 230 | 235 |
| Gly Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser | | 240 |
| | 245 | 250 |
| Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Gly Arg | | 255 |
| | 260 | 265 |
| Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn | | 270 |
| | 275 | 280 |
| Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu Ile Lys Arg Ala Leu Arg | | 285 |
| | 290 | 295 |
| Arg Leu Leu Gly Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala | | 300 |
| 305 | 310 | 315 |
| | | 320 |

<210> 2588

<211> 316

<212> PRT

<213> Unknown (3093312-dir-1364-13 conceptual translation of range 136584-137530)

<400>2588

| | |
|---|-----|
| Val Ala Met Ile Ile Ile Cys Asn Asp Ser His Ser Asp Phe Ile Leu | |
| 1 | 5 |
| Leu Gly Phe Ser Asn Lys Pro His Leu Glu Lys Ile Leu Phe Val Ile | |
| | 20 |
| Ile Phe Ile Phe Tyr Phe Leu Thr Leu Ala Gly Asn Met Val Ile Val | |
| | 35 |
| Leu Val Ser Leu Lys Asp Pro Lys Leu His Ile Pro Met Tyr Phe Phe | |
| | 50 |
| Leu Ser Asn Leu Ser Leu Val Asp Leu Cys Leu Thr Ser Ser Cys Val | |
| 65 | 70 |
| Pro Gln Met Leu Ile Asn Phe Trp Gly Pro Glu Lys Thr Ile Ser Tyr | |
| | 85 |
| Ile Gly Cys Ala Ile Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr | |
| | 100 |
| Glu Tyr Val Leu Leu Val Val Met Ala Val Asp Cys Tyr Val Ala Val | |
| | 115 |
| Cys His Pro Leu Gln Asn Thr Met Ile Met His Pro Lys Leu Cys Leu | |
| | 130 |
| Gln Leu Ala Ile Leu Ala Trp Gly Thr Gly Leu Ala Gln Ser Leu Ile | |
| 145 | 150 |
| Gln Ser Pro Ala Thr Leu Arg Leu Pro Phe Cys Ser Gln Arg Met Val | |
| | 165 |
| Asp Asp Val Val Cys Glu Val Pro Ala Leu Ile Gln Leu Ser Ser Thr | |
| | 180 |
| Asp Thr Thr Tyr Ser Glu Ile Gln Met Ser Ile Ala Ser Val Val Leu | |
| | 195 |
| Leu Val Met Pro Leu Ile Ile Ile Leu Ser Ser Ser Gly Ala Ile Ala | |
| | 210 |
| Lys Ala Val Leu Arg Ile Lys Ser Thr Ala Gly Gln Lys Lys Ala Phe | |
| 225 | 230 |
| Gly Thr Cys Ile Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr | |
| | 245 |
| Val Thr Gly Val Tyr Leu Gln Pro Lys Asn His Tyr Pro His Glu Trp | |
| | 260 |
| Gly Lys Phe Leu Thr Leu Phe Tyr Thr Val Val Thr Pro Thr Leu Asn | |
| | 275 |
| Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Ile | |
| | 290 |
| | 295 |
| | 300 |

Arg Leu Gly Arg Arg Thr Trp Asp Ser Gln Asn Asn
305 310 315

<210> 2589

<211> 348

<212> PRT

<213> Unknown (5262456-dir-612-12 conceptual translation of range 61285-62326)

<220>

<221> VARIANT

<222> (1)...(348)

<223> Xaa = Any Amino Acid

<400>2589

Leu Ile Phe Cys Pro Met Ala Asn Thr Leu Ser Ser Leu Asn Ser Cys
1 5 10 15
Asn Val Phe Leu Leu Val Leu Asn Arg Val Met Gly Met Thr Asn Ser
20 25 30
Ser Val Lys Gly Asp Phe Ile Leu Val Gly Phe Ser His Gln Pro His
35 40 45
Leu Glu Lys Ile Leu Phe Val Ala Val Leu Ile Ser Tyr Leu Leu Thr
50 55 60
Leu Val Gly Asn Thr Val Ile Ile Leu Ile Cys Ser Val Asp Pro Lys
65 70 75 80
Leu Lys Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Leu Val Asp
85 90 95
Ile Cys Phe Thr Thr Ser Ile Val Pro Gln Leu Leu Trp Asn Leu Lys
100 105 110
Gly Pro Asp Lys Thr Ile Thr Phe Leu Gly Cys Val Ile Gln Leu Tyr
115 120 125
Ile Ser Leu Ala Leu Gly Ser Thr Glu Cys Val Leu Leu Ala Val Met
130 135 140
Ala Phe Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu His Tyr Thr Ala
145 150 155 160
Val Met Asn Pro Gln Leu Cys Gln Ala Leu Ala Gly Val Ala Trp Leu
165 170 175
Ser Gly Val Gly Asn Thr Leu Ile Gln Gly Thr Val Thr Leu Trp Leu
180 185 190
Pro Arg Cys Gly His Arg Leu Leu Gln His Phe Phe Cys Glu Val Pro
195 200 205
Ser Met Ile Lys Leu Ala Cys Val Asp Ile His Asp Asn Glu Val Gln
210 215 220
Leu Phe Val Ala Ser Leu Val Leu Leu Leu Pro Leu Val Leu Ile
225 230 235 240
Leu Leu Ser Tyr Gly His Ile Ala Lys Val Val Ile Arg Ile Lys Ser
245 250 255
Val Gln Ala Trp Cys Lys Gly Leu Gly Thr Cys Gly Ser His Leu Ile
260 265 270
Val Val Ser Leu Phe Cys Gly Thr Ile Thr Ala Val Tyr Ile Gln Ser
275 280 285
Asn Ser Ser Tyr Ala His Ala His Gly Lys Phe Ile Ser Leu Phe Tyr
290 295 300
Thr Val Val Thr Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
305 310 315 320
Asn Asp Val Lys Gly Ala Leu Arg Leu Phe Asn Arg Asp Leu Gly Thr
325 330 335
Xaa Lys Met Lys Gln Ser Thr Gln Arg Ser Thr Phe
340 345

<210> 2590

<211> 312

<212> PRT

<213> Unknown (200153-dir-0-11 conceptual translation of range 1-936)

<400>2590

```

Met Glu Val Asp Ser Asn Ser Ser Ser Gly Thr Phe Ile Leu Met Gly
 1          5          10          15
Val Ser Asp His Pro His Leu Glu Ile Phe Phe Ala Val Ile Leu
          20          25          30
Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu
          35          40          45
Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
          50          55          60
Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln
65          70          75          80
Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly
          85          90          95
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
          100          105          110
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
          115          120          125
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
          130          135          140
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
145          150          155          160
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn
          165          170          175
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
          180          185          190
Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Val
          195          200          205
Val Pro Val Ser Val Ile Leu Val Ser Tyr Cys Phe Ile Ala Gln Ala
          210          215          220
Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Asn Thr
225          230          235          240
Cys Val Ser His Leu Val Val Val Phe Leu Phe Tyr Gly Ser Ala Ile
          245          250          255
Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Ser Gln Gly Lys
          260          265          270
Phe Ile Ser Leu Phe Tyr Ser Val Val Thr Pro Met Val Asn Pro Leu
          275          280          285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu
          290          295          300
Leu Gly Lys Gly Arg Gly Ala Ser
305          310

```

<210> 2591

<211> 157

<212> PRT

<213> Unknown (902728-dir-0-6 conceptual translation of range 2-472)

<400>2591

```

Val Cys Arg Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys
 1          5          10          15
Trp Val Leu Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val
          20          25          30
Ile Gln Ser Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys
          35          40          45
Val Asp Asn Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys
          50          55          60
Gly Asp Thr Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe

```

| | | | | | | |
|-------------------------|---|-----------------------------|--|----|--|----|
| 65 | | 70 | | 75 | | 80 |
| Phe Thr Ala Val | Pro Leu Ser Ile Ile | Leu Val Ser Tyr Cys Phe Ile | | | | |
| | 85 | 90 | | | | |
| Ala Gln Ala Val | Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala | | | | | |
| | 100 | 105 | | | | |
| Phe Asn Thr Cys Val | Ser His Leu Val Val Val Phe Leu Phe Tyr Gly | | | | | |
| | 115 | 120 | | | | |
| Ser Ala Ile Tyr Gly Tyr | Leu Leu Pro Ala Lys Ser Ser Asn Gln Asp | | | | | |
| | 130 | 135 | | | | |
| Gln Gly Lys Phe Ile Ser | Leu Phe Tyr Ser Val Val Thr | | | | | |
| 145 | 150 | 155 | | | | |

<210> 2592

<211> 312

<212> PRT

<213> Unknown (p146-dir-0-11 conceptual translation of range 1-936)

<400>2592

| | |
|-------------------------|---|
| Met Asp Gly Val | Asn Asp Ser Ser Leu Gln Gly Phe Val Leu Met Ser |
| 1 | 5 |
| Ile Ser Asp His | Pro Gln Leu Glu Met Ile Phe Phe Ile Ala Ile Leu |
| | 20 |
| Phe Ser Tyr Leu Leu Thr | Leu Leu Gly Asn Ser Thr Ile Ile Leu Leu |
| | 35 |
| Ser Arg Leu Glu Ala Arg | Leu His Thr Pro Met Tyr Phe Phe Leu Ser |
| | 50 |
| Asn Leu Ser Ser Leu Asp | Leu Ala Phe Ala Thr Ser Ser Val Pro Gln |
| 65 | 70 |
| Met Leu Ile Asn Leu Trp | Gly Pro Gly Lys Thr Ile Ser Tyr Gly Gly |
| | 85 |
| Cys Ile Thr Gln Leu Tyr | Val Phe Leu Trp Leu Gly Ala Thr Glu Cys |
| | 100 |
| Ile Leu Leu Val Val Met | Ala Phe Asp Arg Tyr Val Ala Val Cys Arg |
| | 115 |
| Pro Leu Arg Tyr Thr Ala | Ile Met Asn Pro Gln Leu Cys Trp Leu Leu |
| | 130 |
| Ala Val Ile Ala Trp Leu | Gly Gly Leu Gly Asn Ser Val Ile Gln Ser |
| 145 | 150 |
| Thr Phe Thr Leu Gln Leu | Pro Leu Cys Gly His Arg Arg Val Glu Gly |
| | 165 |
| Phe Leu Cys Glu Val Pro | Ala Met Ile Lys Leu Ala Cys Gly Asp Thr |
| | 180 |
| Ser Leu Asn Gln Ala Val | Leu Asn Gly Val Cys Thr Phe Phe Thr Ala |
| | 195 |
| Val Pro Leu Ser Ile Ile | Val Ile Ser Tyr Cys Leu Ile Ala Gln Ala |
| | 210 |
| Val Leu Lys Ile His Ser | Ala Glu Gly Arg Arg Lys Ala Phe Asn Thr |
| 225 | 230 |
| Cys Leu Ser His Leu Leu | Pro Ala Lys Asn Ser Lys Gln Asp Gln Gly Lys |
| | 245 |
| Tyr Gly Tyr Leu Leu Pro | Ala Lys Asn Ser Lys Gln Asp Gln Gly Lys |
| | 260 |
| Phe Ile Ser Leu Phe Tyr | Ser Leu Val Thr Pro Met Val Asn Pro Leu |
| | 275 |
| Ile Tyr Thr Leu Arg Asn | Met Glu Val Lys Gly Ala Leu Arg Arg Leu |
| | 290 |
| Leu Gly Lys Gly Arg Glu | Val Gly |
| 305 | 310 |

<210> 2593

<211> 216

<212> PRT

<213> Unknown (2921701-dir-0-8 conceptual translation of range 2-648)

<400>2593

```

Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
 1          5          10          15
Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
 20          25          30
Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
 35          40          45
Ala Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu His
 50          55          60
Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ala
 65          70          75          80
Ser Arg Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr
 85          90          95
Leu Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys
 100         105         110
Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn
 115         120         125
Glu Ala Glu Leu Phe Leu Val Ser Glu Leu Phe His Leu Ile Pro Leu
 130         135         140
Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg
 145         150         155         160
Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser
 165         170         175
His Leu Ile Val Val Ser Leu Phe Lys Gly Thr Ala Val Ser Val Tyr
 180         185         190
Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Gln Gly Lys Met Val Ser
 195         200         205
Leu Phe Tyr Gly Ile Ile Ala Pro
 210         215

```

<210> 2594

<211> 216

<212> PRT

<213> Unknown (2921699-dir-0-8 conceptual translation of range 2-649)

<400>2594

```

Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
 1          5          10          15
Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
 20          25          30
Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
 35          40          45
Ala Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu His
 50          55          60
Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ala
 65          70          75          80
Ser Trp Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr
 85          90          95
Leu Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys
 100         105         110
Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn
 115         120         125
Glu Ala Glu Leu Phe Leu Val Ser Glu Leu Phe His Leu Ile Pro Leu
 130         135         140
Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg
 145         150         155         160
Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser
 165         170         175

```


His Leu Ile Val Val Ser Leu Phe Tyr Ser Thr Ala Val Ser Val Tyr
 180 185 190
 Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Gln Gly Lys Met Val Ser
 195 200 205
 Leu Phe Tyr Gly Ile Ile Ala Pro
 210 215

<210> 2595

<211> 215

<212> PRT

<213> Unknown (2921706-dir-0-8 conceptual translation of range 2-646)

<220>

<221> VARIANT

<222> (1)...(215)

<223> Xaa = Any Amino Acid

<400>2595

Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
 1 5 10 15
 Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
 20 25 30
 Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
 35 40 45
 Ala Val Thr Ser Leu Ile Gly Cys Ser Tyr Cys Arg Pro Leu His Tyr
 50 55 60
 Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ala Ser
 65 70 75 80
 Trp Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr Leu
 85 90 95
 Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys Glu
 100 105 110
 Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn Glu
 115 120 125
 Ala Glu Leu Phe Leu Asp Ser Glu Leu Phe His Leu Ile Pro Leu Thr
 130 135 140
 Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg Ile
 145 150 155 160
 Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser His
 165 170 175
 Leu Ile Val Val Ser Leu Phe Tyr Ser Thr Ala Val Ser Val Tyr Leu
 180 185 190
 Xaa Pro Pro Ser Pro Ser Ser Lys Asp Gln Gly Lys Met Val Ser Leu
 195 200 205
 Phe Tyr Gly Ile Ile Ala Pro
 210 215

<210> 2596

<211> 112

<212> PRT

<213> Unknown (1142995-dir-0-5 conceptual translation of range 1-336)

<400>2596

Arg Pro Leu His Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln
 1 5 10 15
 Leu Ala Ala Val Ser Trp Ile Ile Gly Phe Gly Asn Ser Val Trp Leu
 20 25 30
 Ser Ile Leu Thr Leu Gln Leu Pro Arg Cys Gly His Tyr Val Ile Asp
 35 40 45
 His Phe Leu Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp
 50 55 60

Val Thr Ala Asn Glu Ala Glu Leu Phe Phe Val Ser Val Phe Phe His
 65 70 75 80
 Leu Thr Pro Leu Ser Leu Ile Leu Thr Ser Tyr Ala Phe Ile Ala Arg
 85 90 95
 Ala Ile Leu Lys Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly
 100 105 110

<210> 2597

<211> 314

<212> PRT

<213> Unknown (3080457-rev-750-12 conceptual translation of range 75137-76079)

<400>2597

Asn Met Asn Trp Val Asn Lys Ser Val Pro Gln Glu Phe Ile Leu Leu
 1 5 10 15
 Val Phe Ser Asp Gln Pro Trp Leu Glu Ile Pro Pro Phe Val Met Phe
 20 25 30
 Leu Phe Ser Tyr Ile Leu Thr Ile Phe Gly Asn Leu Thr Ile Ile Leu
 35 40 45
 Val Ser His Val Asp Phe Lys Leu His Thr Pro Met Tyr Phe Phe Leu
 50 55 60
 Ser Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro
 65 70 75 80
 Gln Met Leu Val Asn Ile Cys Asn Thr Arg Lys Val Ile Ser Tyr Gly
 85 90 95
 Gly Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Ser Thr Glu
 100 105 110
 Cys Leu Leu Leu Ala Val Met Cys Phe Asp Arg Phe Val Ala Ile Cys
 115 120 125
 Arg Pro Leu His Tyr Ser Ile Ile Met His Gln Arg Leu Cys Phe Gln
 130 135 140
 Leu Ala Ala Ala Ser Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln
 145 150 155 160
 Ser Thr Trp Thr Leu Lys Met Pro Leu Cys Gly His Lys Glu Val Asp
 165 170 175
 His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp
 180 185 190
 Thr Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val Leu Phe Leu
 195 200 205
 Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln
 210 215 220
 Ala Val Leu Arg Ile Gln Ser Ala Glu Gly Gln Arg Lys Ala Phe Gly
 225 230 235 240
 Thr Cys Gly Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala
 245 250 255
 Ile Ser Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Arg Gly
 260 265 270
 Lys Met Val Ser Leu Phe Cys Gly Ile Ile Ala Pro Met Leu Asn Pro
 275 280 285
 Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu Ala Phe Lys Arg
 290 295 300
 Leu Leu Gln Arg Val Phe Leu Ile Lys Lys
 305 310

<210> 2598

<211> 343

<212> PRT

<213> Unknown (506841-dir-0-12 conceptual translation of range 60-1090)

<220>

<221> VARIANT

<222> (1)...(343)

<223> Xaa = Any Amino Acid

<400>2598

```

Cys Ile Ile Tyr Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe
 1           5           10           15
Ile Leu Leu Gly Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe
      20           25           30
Val Val Phe Leu Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met
      35           40           45
Ile Ile Leu Val Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr
      50           55           60
Phe Phe Leu Thr Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser
65           70           75           80
Thr Val Pro Gln Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile
      85           90           95
Ser Tyr Gly Gly Cys Val Val Gln Leu Phe Ile Phe Leu Ser Leu Gly
      100          105          110
Ser Thr Glu Cys Phe Leu Leu Gly Val Met Ser Leu Asp Arg Phe Leu
      115          120          125
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg
      130          135          140
Cys Leu His Leu Ala Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser
145          150          155          160
Val Leu Gln Ser Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Lys
      165          170          175
Glu Val Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser
      180          185          190
Cys Val Asp Thr Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val
      195          200          205
Leu Phe Leu Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe
      210          215          220
Ile Val Gln Ala Val Leu Lys Ile Arg Ser Ala Glu Cys Arg Arg Lys
225          230          235          240
Ala Phe Gly Thr Cys Gly Ser His Leu Ile Val Val Val Leu Phe Tyr
      245          250          255
Gly Thr Ala Ile Tyr Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys
      260          265          270
Asp Arg Gly Lys Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met
      275          280          285
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu Val Lys Gly Ala
      290          295          300
Phe Lys Arg Leu Met Lys Arg Ile Ile Leu Ile Gly Lys Xaa Gly Val
305          310          315          320
Pro Glu Xaa Xaa Pro Tyr Xaa Tyr Lys Tyr Ile Phe Ile Ala Cys Lys
      325          330          335
Leu Tyr Cys Phe Leu Leu Cys
      340

```

<210> 2599

<211> 348

<212> PRT

<213> Unknown (3093312-rev-75-13 conceptual translation of range 7680-8721)

<220>

<221> VARIANT

<222> (1)...(348)

<223> Xaa = Any Amino Acid

<400>2599

```

Leu Ile Ala Phe Leu Ser Tyr Ile Phe Leu Gly Val Arg Asn Lys Xaa
 1           5           10           15
Val Ile Met Asn Trp Glu Asn Glu Ser Ser Pro Lys Glu Phe Ile Leu
          20           25           30
Leu Gly Phe Ser Asp Arg Ala Trp Leu Gln Met Pro Leu Phe Val Val
          35           40           45
Leu Leu Ile Ser Tyr Thr Ile Thr Ile Phe Gly Asn Val Ser Ile Met
          50           55           60
Met Val Cys Ile Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe
          65           70           75           80
Leu Thr Asn Leu Ser Ile Leu Asp Leu Cys Tyr Thr Thr Thr Thr Val
          85           90           95
Pro His Met Leu Val Asn Ile Gly Cys Asn Lys Lys Thr Ile Ser Tyr
          100          105          110
Ala Gly Cys Val Ala His Leu Ile Ile Phe Leu Ala Leu Gly Ala Thr
          115          120          125
Glu Cys Leu Leu Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val
          130          135          140
Cys Arg Pro Leu His Tyr Val Val Ile Met Asn Tyr Trp Phe Cys Leu
          145          150          155          160
Arg Met Ala Ala Phe Ser Trp Leu Ile Gly Phe Gly Asn Ser Val Leu
          165          170          175
Gln Ser Ser Leu Thr Leu Asn Met Pro Arg Cys Gly His Gln Glu Val
          180          185          190
Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala
          195          200          205
Asp Thr Lys Pro Ile Glu Ala Glu Leu Phe Phe Phe Ser Val Leu Ile
          210          215          220
Leu Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Gly Phe Ile Ala
          225          230          235          240
Gln Ala Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe
          245          250          255
Gly Thr Cys Gly Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Thr
          260          265          270
Ala Ile Tyr Met Tyr Leu Gln Pro Pro Ser Ser Thr Ser Lys Asp Trp
          275          280          285
Gly Lys Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Ser Met Leu Asn
          290          295          300
Ser Leu Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Phe Lys
          305          310          315          320
Arg Leu Met Pro Arg Ile Phe Phe Cys Lys Lys Xaa Arg Ser Thr Pro
          325          330          335
Ser Val Met Arg Ile Phe Leu Val Phe Pro Tyr Leu
          340          345

```

<210> 2600

<211> 272

<212> PRT

<213> Unknown (5262456-rev-0-10 conceptual translation of range 184-1000)

<400>2600

```

Met Trp Ile Asn Asn Gln Ser Ser Leu Asp Asp Phe Ile Leu Leu Gly
 1           5           10           15
Phe Ser Asp Arg Pro Trp Leu Glu Thr Pro Leu Val Ile Phe Leu Val
          20           25           30
Ala Tyr Ile Phe Ser Leu Phe Gly Asn Ile Ser Ile Ile Leu Val Ser
          35           40           45
His Leu Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Val Ser Asn
          50           55           60
Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln Met
          65           70           75           80

```

```

Leu Val Asn Leu Arg Gly Pro Glu Lys Thr Ile Ser Tyr Gly Gly Cys
      85      90      95
Val Ala Gln Leu Tyr Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys Ile
      100      105      110
Leu Leu Ala Ile Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Lys Pro
      115      120      125
Leu His Tyr Pro Val Ile Met Asn His Arg Arg Cys Ile His Met Ala
      130      135      140
Ala Gly Thr Trp Ile Ser Gly Phe Ala Asn Ser Leu Val Gln Ser Thr
      145      150      155      160
Leu Thr Val Val Ala Pro Arg Cys Gly Gln Arg Val Leu Asp His Phe
      165      170      175
Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Ile Asp Ile Arg
      180      185      190
Val Asn Glu Met Glu Leu Asn Val Leu Gly Ala Leu Leu Leu Leu Met
      195      200      205
Pro Leu Thr Leu Ile Leu Gly Thr Tyr Val Phe Ile Ala Gln Ala Val
      210      215      220
Met Arg Ile Cys Ser Ala Glu Ser Arg Trp Lys Ala Phe Asn Thr Cys
      225      230      235      240
Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Phe Thr Ala Ile Ser
      245      250      255
Met Tyr Val Gln Pro Pro Ser Ser Tyr Ser His Asp Arg Gly Lys Ile
      260      265      270

```

<210> 2601

<211> 350

<212> PRT

<213> Unknown (3093312-dir-1027-12 conceptual translation of range 102817-103865)

<220>

<221> VARIANT

<222> (1)...(350)

<223> Xaa = Any Amino Acid

<400>2601

```

Phe Leu Ser Gly Asn Arg Lys Xaa Met Met Met Glu Lys Xaa Asn Ala
  1      5      10      15
Ser Ser Glu Gly Tyr Phe Ile Leu Val Gly Phe Ser Asn Trp Pro Tyr
      20      25      30
Leu Glu Val Val Leu Phe Val Val Ile Leu Ile Phe Cys Leu Met Thr
      35      40      45
Leu Ile Gly Asn Leu Phe Ile Ile Ile Leu Thr Tyr Leu Asp Ser His
      50      55      60
Leu His Thr Pro Leu Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp
      65      70      75      80
Leu Cys Tyr Thr Thr Ser Ser Ile Pro Gln Leu Leu Val Ser Leu Trp
      85      90      95
Gly Val Glu Lys Thr Ile Ser Tyr Ala Gly Cys Met Val Gln Leu Tyr
      100      105      110
Phe Phe Leu Thr Leu Gly Thr Thr Glu Cys Val Leu Leu Val Val Met
      115      120      125
Ser Tyr Asp Arg Tyr Ala Ala Val Cys Arg Pro Leu His Tyr Thr Val
      130      135      140
Leu Met His Ser Arg Phe Cys His Leu Leu Ala Val Ala Ser Trp Val
      145      150      155      160
Ser Gly Phe Thr Asn Pro Ala Leu His Ser Ser Phe Thr Phe Trp Val
      165      170      175
Pro Leu Cys Gly His Arg Gln Ile Asp His Phe Phe Cys Glu Val Pro
      180      185      190

```

Ala Leu Leu Xaa Leu Ser Phe Val Asn Thr Arg Glu Asn Lys Leu Thr
 195 200 205
 Leu Met Ile Thr Ser Ser Ile Phe Val Leu Leu Leu Thr Leu Ile
 210 215 220
 Phe Thr Ser Tyr Gly Ala Ile Ala Gln Ala Val Leu Arg Met Gln Ser
 225 230 235 240
 Thr Thr Gly Leu Gln Lys Val Phe Gly Thr Cys Gly Ala His His Met
 245 250 255
 Val Val Ser Leu Phe Phe Ile Pro Ala Met Cys Met Tyr Leu Gln Pro
 260 265 270
 Pro Ser Gly Asn Ser Gln Asp Gln Gly Lys Phe Ile Ala Leu Phe Tyr
 275 280 285
 Thr Val Val Thr Pro Ser Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
 290 295 300
 Lys Asp Val Arg Gly Val Val Lys Arg Leu Arg Gly Trp Glu Xaa Ala
 305 310 315 320
 Cys Val Cys Val Ile Leu Thr Ile Xaa Trp Ser Leu Ser Ser Gln Xaa
 325 330 335
 Phe Ile His Leu Phe Ile Tyr Gln Pro Phe Phe Tyr Ser Leu
 340 345 350

<210> 2602

<211> 205

<212> PRT

<213> Unknown (5262456-dir-273-9 conceptual translation of range 27452-28066)

<400>2602

Gln Lys Ile Ala Lys Met Ile Asn Asp Ser Tyr Phe Gly Trp Leu Met
 1 5 10 15
 Leu Leu Gly Phe Pro Gly Lys Pro Gln Leu Glu Met Ile Ile Ser Gly
 20 25 30
 Val Val Phe Phe Phe Tyr Ala Ile Ser Leu Met Gly Asn Met Val Leu
 35 40 45
 Ile Leu Leu Pro Leu Leu Asp Lys His Leu Gln Thr Pro Ile Tyr Phe
 50 55 60
 Phe Leu Arg Asn Leu Ala Ile Leu Asp Leu Cys Tyr Thr Thr Asn Ile
 65 70 75 80
 Val Pro Gln Met Leu Val Asn Ala Trp Gly Lys Asp Lys Lys Ile Thr
 85 90 95
 Phe Gly Gly Cys Ala Phe Gln Leu Phe Thr Asn Val Thr Leu Cys Thr
 100 105 110
 Val Glu Cys Met Leu Leu Ala Val Met Ser Tyr Asp Pro Phe Asn Ala
 115 120 125
 Val Cys Lys Pro Leu Asp Tyr Met Thr Ile Met Asn Pro Gln Leu Cys
 130 135 140
 Gln Gly Leu Val Ala Met Thr Trp Leu Ile Gly Val Thr Asn Cys Met
 145 150 155 160
 Ile Leu Ser Pro Cys Pro Val Ser Leu Pro Arg Cys Gly Asp His His
 165 170 175
 Leu Asp His Tyr Phe Cys Glu Ile Ser Ala Met Val Lys Ile Ala Cys
 180 185 190
 Gly Ala Thr Thr Val Met Glu Glu Thr Val Arg Val Lys
 195 200 205

<210> 2603

<211> 210

<212> PRT

<213> Unknown (2924249-rev-741-9 conceptual translation of range 74285-74912)

<220>

<221> VARIANT

<222> (1)...(210)

<223> Xaa = Any Amino Acid

<400>2603

```

Ser Val Lys Tyr Leu Asn Glu Ser Phe Pro Glu Asp Phe Ile Leu Met
 1          5          10          15
Gly Phe Val Lys Tyr Pro Trp Leu Asp Phe Leu Leu Phe Cys Val Leu
          20          25          30
Leu Thr Phe Tyr Met Phe Thr Leu Leu Gly Asn Ser Ala Ile Ile Leu
          35          40          45
Val Ser Gln Leu Asp Ser Gln Leu His Ser Pro Met Tyr Phe Leu Leu
          50          55          60
Thr Ser Leu Ser Val Leu Tyr Leu Cys Phe Thr Thr Thr Val Pro
65          70          75          80
Gln Met Leu Phe Asn Leu Gly Gly Thr Asn Lys Asn Ile Thr Xaa Ile
          85          90          95
Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Ala Cys Ile Glu
          100          105          110
Cys Val Leu Leu Gly Ile Val Ala Leu Asp Cys Tyr Val Ala Val Cys
          115          120          125
Lys Pro Pro Arg Tyr Thr Ile Ile Asp His Lys Val Cys Leu His
          130          135          140
Leu Ser Ser Thr Ala Trp Leu Ile Gly Leu Ala Asn Ser Leu Leu Gln
145          150          155          160
Ser Thr Ile Thr Ile Gln Leu Pro Leu Xaa Arg Cys Ile Ala Gln Ile
          165          170          175
Phe Leu Xaa Leu Glu Ser Val Thr Xaa Gln Ser Leu Thr Val Thr Tyr
          180          185          190
Leu Xaa Asp Leu Leu Gln His Ser Ile Xaa Gly Gln Leu His Ala Gly
          195          200          205
Glu Leu
          210

```

<210> 2604

<211> 210

<212> PRT

<213> Unknown (4156137-rev-1191-9 conceptual translation of range 119253-119880)

<220>

<221> VARIANT

<222> (1)...(210)

<223> Xaa = Any Amino Acid

<400>2604

```

Ser Val Lys Tyr Leu Asn Glu Ser Phe Pro Glu Asp Phe Ile Leu Met
 1          5          10          15
Gly Phe Val Lys Tyr Pro Trp Leu Asp Phe Leu Leu Phe Cys Val Leu
          20          25          30
Leu Thr Phe Tyr Met Phe Thr Leu Leu Gly Asn Ser Ala Ile Ile Leu
          35          40          45
Val Ser Gln Leu Asp Ser Gln Leu His Ser Pro Met Tyr Phe Leu Leu
          50          55          60
Thr Ser Leu Ser Val Leu Tyr Leu Cys Phe Thr Thr Thr Val Pro
65          70          75          80
Gln Met Leu Phe Asn Leu Gly Gly Thr Asn Lys Asn Ile Thr Xaa Ile
          85          90          95
Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Ala Cys Thr Glu
          100          105          110
Cys Val Leu Leu Gly Ile Val Ala Leu Asp Cys Tyr Val Ala Val Cys
          115          120          125

```

Lys Pro Pro Arg Tyr Thr Ile Ile Ile Asp His Lys Val Tyr Leu His
 130 135 140
 Leu Ser Ser Thr Ala Trp Leu Ile Gly Leu Ala Asn Ser Leu Leu Gln
 145 150 155 160
 Ser Thr Ile Thr Ile Gln Leu Pro Leu Xaa Arg Cys Ile Ala Gln Ile
 165 170 175
 Phe Leu Xaa Leu Glu Ser Val Thr Xaa Gln Ser Leu Thr Val Thr Tyr
 180 185 190
 Leu Xaa Asp Leu Leu Gln His Ser Ile Xaa Gly Gln Leu His Ala Gly
 195 200 205
 Glu Leu
 210

<210> 2605

<211> 216

<212> PRT

<213> Unknown (2921643-dir-0-8 conceptual translation of range 2-649)

<400>2605

Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala
 1 5 10 15
 His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala
 20 25 30
 Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu
 35 40 45
 Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg
 50 55 60
 Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr
 65 70 75 80
 Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr Ala Ile Thr
 85 90 95
 Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His Ile Ser Cys
 100 105 110
 Glu Leu Leu Ala Val Val Arg Leu Ala Arg Val Asp Thr Ser Ser Asn
 115 120 125
 Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe
 130 135 140
 Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys
 145 150 155 160
 Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser
 165 170 175
 His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr
 180 185 190
 Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser
 195 200 205
 Val Phe Tyr Ala Ile Leu Thr Pro
 210 215

<210> 2606

<211> 216

<212> PRT

<213> Unknown (2921711-dir-0-8 conceptual translation of range 2-649)

<400>2606

Leu Val Asp Val Ser Cys Ala Thr Ser Val Val Pro Gln Leu Leu Ala
 1 5 10 15
 His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala
 20 25 30
 Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu
 35 40 45
 Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg


```

      50              55              60
Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr
65              70              75              80
Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr Ala Ile Thr
      85              90              95
Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His Ile Ser Cys
      100              105              110
Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn
      115              120              125
Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe
      130              135              140
Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys
145              150              155              160
Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser
      165              170              175
His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr
      180              185              190
Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser
      195              200              205
Val Phe Tyr Ala Ile Leu Thr Pro
      210              215

```

<210> 2607

<211> 317

<212> PRT

<213> Unknown (1336042-dir-0-11 conceptual translation of range 1-951)

<400>2607

```

Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
1      5      10      15
Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
      20      25      30
Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
      35      40      45
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
      50      55      60
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
65      70      75      80
Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
      85      90      95
Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
      100      105      110
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
      115      120      125
Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
      130      135      140
Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
145      150      155      160
Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
      165      170      175
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
      180      185      190
Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
      195      200      205
Thr Pro Leu Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
      210      215      220
Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
225      230      235      240
Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
      245      250      255
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys

```

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | 260 | | | | | | 265 | | | | | 270 | | | | |
| Leu | Phe | Ser | Val | Phe | Tyr | Ala | Ile | Leu | Thr | Pro | Met | Leu | Asn | Pro | Met | | |
| | | 275 | | | | | | 280 | | | | | 285 | | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Glu | Val | Lys | Gly | Ala | Trp | Gln | Lys | Leu | | |
| | | 290 | | | | 295 | | | | | 300 | | | | | | |
| Leu | Trp | Lys | Phe | Ser | Gly | Leu | Thr | Ser | Lys | Leu | Ala | Thr | | | | | |
| 305 | | | | | 310 | | | | | 315 | | | | | | | |

<210> 2608

<211> 216

<212> PRT

<213> Unknown (2921713-dir-0-8 conceptual translation of range 2-649)

<400>2608

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Leu | Val | Asp | Val | Ser | Tyr | Ala | Thr | Ser | Val | Val | Pro | Gln | Leu | Leu | Ala | | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | | |
| His | Phe | Leu | Ala | Glu | His | Lys | Ala | Thr | Pro | Phe | Gln | Ser | Cys | Ala | Ala | | |
| | | | 20 | | | | | 25 | | | | | 30 | | | | |
| Gln | Leu | Phe | Phe | Ser | Leu | Ala | Leu | Gly | Gly | Ile | Glu | Phe | Val | Leu | Leu | | |
| | | 35 | | | | | 40 | | | | | 45 | | | | | |
| Ala | Val | Met | Thr | Tyr | Asp | Arg | Tyr | Val | Ala | Val | Cys | Asp | Ala | Leu | Arg | | |
| | | 50 | | | | 55 | | | | | 60 | | | | | | |
| Tyr | Ser | Ala | Ile | Met | His | Gly | Gly | Leu | Cys | Ala | Arg | Leu | Ala | Ile | Thr | | |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | | | |
| Ser | Trp | Val | Ser | Gly | Phe | Ile | Ser | Ser | Pro | Val | Gln | Thr | Ala | Ile | Thr | | |
| | | | | 85 | | | | | 90 | | | | | 95 | | | |
| Phe | Gln | Leu | Pro | Met | Cys | Arg | Asn | Lys | Phe | Ile | Asp | His | Ile | Ser | Cys | | |
| | | | 100 | | | | | 105 | | | | | 110 | | | | |
| Glu | Leu | Leu | Ala | Val | Val | Arg | Leu | Ala | Cys | Val | Asp | Thr | Ser | Ser | Asn | | |
| | | | 115 | | | | 120 | | | | | 125 | | | | | |
| Glu | Val | Thr | Ile | Met | Val | Ser | Ser | Val | Val | Leu | Leu | Met | Thr | Pro | Phe | | |
| | | 130 | | | | 135 | | | | | 140 | | | | | | |
| Cys | Leu | Val | Leu | Leu | Ser | Tyr | Ile | Gln | Ile | Asn | Ser | Thr | Ile | Leu | Lys | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | |
| Ile | Gln | Ser | Arg | Glu | Gly | Arg | Lys | Lys | Ala | Phe | His | Thr | Cys | Ala | Ser | | |
| | | | 165 | | | | | | 170 | | | | | 175 | | | |
| His | Leu | Thr | Val | Val | Ala | Leu | Cys | Tyr | Gly | Val | Ala | Ile | Phe | Thr | Tyr | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | |
| Ile | Gln | Pro | His | Ser | Ser | Pro | Ser | Val | Leu | Gln | Glu | Lys | Leu | Phe | Ser | | |
| | | 195 | | | | 200 | | | | | | 205 | | | | | |
| Val | Phe | Tyr | Ala | Ile | Leu | Thr | Pro | | | | | | | | | | |
| | | 210 | | | | 215 | | | | | | | | | | | |

<210> 2609

<211> 301

<212> PRT

<213> Unknown (p161-dir-0-11 conceptual translation of range 2-903)

<400>2609

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Trp | Val | Ser | Glu | Phe | Ile | Leu | Leu | Gly | Leu | Ser | Ser | Asp | Trp | Asp | Thr | | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | | |
| Gln | Val | Ser | Leu | Phe | Val | Leu | Phe | Leu | Val | Met | Tyr | Val | Val | Thr | Val | | |
| | | | 20 | | | | | 25 | | | | | 30 | | | | |
| Leu | Gly | Asn | Cys | Leu | Ile | Val | Leu | Leu | Ile | Arg | Leu | Asp | Ser | Arg | Leu | | |
| | | 35 | | | | | 40 | | | | | 45 | | | | | |
| His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Thr | Asn | Leu | Ser | Leu | Val | Asp | Val | | |
| | | 50 | | | | 55 | | | | | 60 | | | | | | |
| Ser | Tyr | Ala | Thr | Ser | Val | Val | Pro | Gln | Leu | Leu | Ala | His | Phe | Leu | Ala | | |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | | | |
| Glu | His | Lys | Ala | Ile | Ser | Phe | Gln | Ser | Cys | Ala | Ala | Gln | Leu | Phe | Phe | | |
| | | | | 85 | | | | | 90 | | | | | 95 | | | |

Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala
 100 105 110
 Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg Tyr Ser Ala Ile
 115 120 125
 Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser
 130 135 140
 Gly Phe Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe Gln Leu Pro
 145 150 155 160
 Met Cys Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala
 165 170 175
 Val Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile
 180 185 190
 Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu
 195 200 205
 Leu Ser Tyr Ile Gln Ile Thr Ser Thr Ile Leu Lys Ile Gln Ser Arg
 210 215 220
 Glu Gly Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val
 225 230 235 240
 Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His
 245 250 255
 Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser Val Phe Tyr Ala
 260 265 270
 Ile Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys
 275 280 285
 Glu Val Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
 290 295 300

<210> 2610

<211> 334

<212> PRT

<213> Unknown (3766130-dir-170-13 conceptual translation of range 17111-18112)

<220>

<221> VARIANT

<222> (1)...(334)

<223> Xaa = Any Amino Acid

<400>2610

Phe Cys Phe Phe Leu Thr Leu Ser Thr Asp Xaa Tyr Ser Ser His Phe
 1 5 10 15
 Xaa Met Glu Ile Asp Asn Gln Thr Trp Val Arg Glu Phe Ile Leu Leu
 20 25 30
 Gly Leu Ser Ser Asp Trp Cys Thr Gln Ile Ser Leu Phe Ser Leu Phe
 35 40 45
 Leu Val Thr Tyr Leu Met Thr Val Leu Gly Asn Cys Leu Ile Val Leu
 50 55 60
 Leu Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
 65 70 75 80
 Thr Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro
 85 90 95
 Gln Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln
 100 105 110
 Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu
 115 120 125
 Phe Val Leu Leu Ala Val Met Ala Tyr Asp Arg His Val Ala Val Ser
 130 135 140
 Asp Arg Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg
 145 150 155 160
 Leu Ala Ile Thr Ser Trp Val Ser Gly Ser Ile Asn Ser Leu Val Gln
 165 170 175

Thr Ala Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Phe Ile Asp
 180 185 190
 His Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp
 195 200 205
 Thr Ser Ser Asn Glu Ala Ala Ile Met Val Ser Ser Ile Val Leu Leu
 210 215 220
 Met Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr Ile Arg Ile Ile Ser
 225 230 235 240
 Thr Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His
 245 250 255
 Thr Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Thr Thr
 260 265 270
 Ile Phe Thr Tyr Ile Gln Pro His Ser Gly Pro Ser Val Leu Gln Glu
 275 280 285
 Lys Leu Ile Ser Val Phe Tyr Ala Ile Val Met Pro Leu Leu Asn Pro
 290 295 300
 Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp His Lys
 305 310 315 320
 Leu Leu Glu Lys Phe Ser Gly Leu Thr Ser Lys Leu Gly Thr
 325 330

<210> 2611

<211> 298

<212> PRT

<213> Unknown (p172-dir-0-10 conceptual translation of range 2-895)

<400>2611

Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val Ser
 1 5 10 15
 Leu Phe Val Leu Phe Leu Val Met Cys Met Val Thr Met Leu Gly Asn
 20 25 30
 Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr Pro
 35 40 45
 Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr Ala
 50 55 60
 Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His Lys
 65 70 75 80
 Ser Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala
 85 90 95
 Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp Arg
 100 105 110
 Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His Gly
 115 120 125
 Ala Pro Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe Ile
 130 135 140
 Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys Thr
 145 150 155 160
 Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile Arg
 165 170 175
 Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val Ser
 180 185 190
 Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr
 195 200 205
 Ile Trp Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly Arg
 210 215 220
 Lys Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala Leu
 225 230 235 240
 Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser Leu
 245 250 255
 Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu Thr
 260 265 270

Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys
 275 280 285
 Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
 290 295

<210> 2612

<211> 298

<212> PRT

<213> Unknown (p171-dir-0-10 conceptual translation of range 3-896)

<220>

<221> VARIANT

<222> (1)...(298)

<223> Xaa = Any Amino Acid

<400>2612

Ser Asp Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
 1 5 10 15
 Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
 20 25 30
 Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
 35 40 45
 Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
 50 55 60
 Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
 65 70 75 80
 Lys Ser Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
 85 90 95
 Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
 100 105 110
 Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His
 115 120 125
 Gly Ala Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe
 130 135 140
 Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys
 145 150 155 160
 Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile
 165 170 175
 Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val
 180 185 190
 Ser Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser
 195 200 205
 Tyr Ile Xaa Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly
 210 215 220
 Arg Lys Lys Ala Phe His Thr Tyr Ala Ser His Leu Thr Val Val Ala
 225 230 235 240
 Leu Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser
 245 250 255
 Leu Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu
 260 265 270
 Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
 275 280 285
 Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys
 290 295

<210> 2613

<211> 299

<212> PRT

<213> Unknown (p173-dir-0-11 conceptual translation of range 4-900)

<400>2613

Val Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
 1 5 10 15
 Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
 20 25 30
 Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
 35 40 45
 Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
 50 55 60
 Ala Ile Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
 65 70 75 80
 Lys Ala Ile Ser Leu Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
 85 90 95
 Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
 100 105 110
 Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His
 115 120 125
 Gly Ala Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe
 130 135 140
 Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys
 145 150 155 160
 Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile
 165 170 175
 Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val
 180 185 190
 Ser Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser
 195 200 205
 Tyr Ile Trp Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly
 210 215 220
 Arg Lys Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala
 225 230 235 240
 Leu Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser
 245 250 255
 Leu Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu
 260 265 270
 Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
 275 280 285
 Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
 290 295

<210> 2614

<211> 300

<212> PRT

<213> Unknown (p142-dir-0-11 conceptual translation of range 2-900)

<400>2614

Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
 1 5 10 15
 Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
 20 25 30
 Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
 35 40 45
 Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
 50 55 60
 Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
 65 70 75 80
 His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
 85 90 95
 Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
 100 105 110
 Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
 115 120 125

```

His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
 130                135                140
Ser Ile Asn Ser Leu Val His Thr Thr Ile Thr Phe Gln Leu Pro Met
145                150                155                160
Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val
                165                170                175
Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
                180                185                190
Val Phe Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                195                200                205
Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                210                215                220
Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Met Val
225                230                235                240
Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
                245                250                255
Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile
                260                265                270
Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Ser Lys Glu
                275                280                285
Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe
                290                295                300

```

<210> 2615

<211> 300

<212> PRT

<213> Unknown (p162-dir-0-10 conceptual translation of range 1-899)

<400>2615

```

Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
 1                5                10                15
Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
                20                25                30
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
                35                40                45
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
                50                55                60
Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
65                70                75                80
His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
                85                90                95
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
                100                105                110
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
                115                120                125
His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
                130                135                140
Ser Ile Asn Ser Leu Ala His Thr Thr Ile Thr Phe Gln Leu Pro Met
145                150                155                160
Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val
                165                170                175
Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
                180                185                190
Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                195                200                205
Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                210                215                220
Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Val Val
225                230                235                240
Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
                245                250                255

```

Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Thr
 260 265 270
 Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu
 275 280 285
 Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe
 290 295 300

<210> 2616

<211> 300

<212> PRT

<213> Unknown (p160-dir-0-11 conceptual translation of range 3-901)

<400>2616

Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
 1 5 10 15
 Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
 20 25 30
 Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
 35 40 45
 Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
 50 55 60
 Tyr Val Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
 65 70 75 80
 His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
 85 90 95
 Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
 100 105 110
 Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
 115 120 125
 His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
 130 135 140
 Ser Ile Asn Ser Leu Val His Thr Thr Thr Thr Phe Gln Leu Pro Met
 145 150 155 160
 Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val
 165 170 175
 Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
 180 185 190
 Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
 195 200 205
 Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Lys
 210 215 220
 Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Val Val
 225 230 235 240
 Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
 245 250 255
 Asn Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile
 260 265 270
 Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu
 275 280 285
 Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe
 290 295 300

<210> 2617

<211> 298

<212> PRT

<213> Unknown (p165-dir-0-10 conceptual translation of range 1-893)

<400>2617

Val Ser Glu Phe Ile Ile Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
 1 5 10 15
 Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Val Leu


```

      20      25      30
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
  35      40      45
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
  50      55      60
Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
  65      70      75      80
His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
      85      90      95
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Arg Ala Val Met Ala Tyr
      100      105      110
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
      115      120      125
His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
      130      135      140
Ser Ile Asn Ser Leu Val His Thr Thr Ile Thr Phe Gln Leu Pro Met
      145      150      155      160
Cys Thr Asn Lys Phe Val Asp His Ile Ser Cys Glu Ile Leu Ala Val
      165      170      175
Ile Arg Leu Ala Cys Val Asn Thr Ser Ser Asn Glu Val Thr Ile Met
      180      185      190
Val Ser Ser Met Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
      195      200      205
Ser Asp Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
      210      215      220
Gly Arg Arg Lys Ala Phe Gln Thr Cys Ala Ser His Leu Thr Val Val
      225      230      235      240
Ala Leu Cys Tyr Gly Met Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
      245      250      255
Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile
      260      265      270
Glu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu
      275      280      285
Val Lys Gly Ala Trp Lys Lys Leu Leu Trp
      290      295

```

<210> 2618

<211> 299

<212> PRT

<213> Unknown (p157-dir-0-10 conceptual translation of range 3-898)

<220>

<221> VARIANT

<222> (1)...(299)

<223> Xaa = Any Amino Acid

<400>2618

```

Val Ser Glu Phe Ile Ile Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
  1      5      10      15
Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
      20      25      30
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
      35      40      45
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
      50      55      60
Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
      65      70      75      80
His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
      85      90      95
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
      100      105      110

```

Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
 115 120 125
 His Ala Gly Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
 130 135 140
 Ser Ile Asn Ser Leu Val His Thr Ala Ile Thr Phe Gln Leu Pro Arg
 145 150 155 160
 Cys Arg Asn Lys Phe Ile Glu His Ile Ser Cys Glu Ile Leu Ala Val
 165 170 175
 Ile Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
 180 185 190
 Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
 195 200 205
 Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
 210 215 220
 Gly Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val
 225 230 235 240
 Ala Leu Xaa Tyr Gly Val Ala Ile Phe Thr Xaa Ile Gln Pro His Ser
 245 250 255
 Ser Pro Ser Val Ile Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile
 260 265 270
 Val Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Ile Arg Asn Lys Glu
 275 280 285
 Val Lys Gly Ala Trp Gln Lys Ile Leu Trp Lys
 290 295

<210> 2619

<211> 299

<212> PRT

<213> Unknown (p174-dir-0-11 conceptual translation of range 4-900)

<400>2619

Val Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
 1 5 10 15
 Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
 20 25 30
 Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His Thr
 35 40 45
 Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
 50 55 60
 Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
 65 70 75 80
 Lys Ala Ile Ser Leu Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
 85 90 95
 Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
 100 105 110
 Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Val Ile Met His
 115 120 125
 Gly Ala Leu Cys Ala Lys Leu Ala Ile Thr Ser Trp Val Ser Gly Ser
 130 135 140
 Ile Asn Ser Arg Met His Thr Thr Ile Thr Phe Gln Leu Pro Met Cys
 145 150 155 160
 Thr Asn Lys Phe Ile Asp His Ile Phe Cys Glu Ile Leu Ala Leu Ile
 165 170 175
 Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Ile Val
 180 185 190
 Ser Ser Ile Val Leu Leu Met Thr Pro Leu Cys Leu Val Leu Leu Ser
 195 200 205
 Tyr Ile Arg Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu Gly
 210 215 220
 Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala
 225 230 235 240

Leu Cys Tyr Gly Met Ala Ile Phe Thr Tyr Ile His Pro His Ser Ser
 245 250 255
 Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile Leu
 260 265 270
 Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
 275 280 285
 Lys Gly Ala Trp Lys Lys Leu Leu Trp Lys Phe
 290 295

<210> 2620

<211> 317

<212> PRT

<213> Unknown (1314664-dir-0-11 conceptual translation of range 1-951)

<400>2620

Met Gly Thr Gly Asn Gln Thr Trp Val Arg Glu Phe Val Leu Leu Gly
 1 5 10 15
 Leu Ser Ser Asp Trp Asp Thr Glu Val Ser Leu Phe Val Leu Phe Leu
 20 25 30
 Ile Thr Tyr Met Val Thr Val Leu Gly Asn Phe Leu Ile Ile Leu Leu
 35 40 45
 Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
 50 55 60
 Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Ile Ile Pro Gln
 65 70 75 80
 Met Leu Ala His Leu Leu Ala Ala His Lys Ala Ile Pro Phe Val Ser
 85 90 95
 Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
 100 105 110
 Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
 115 120 125
 Pro Leu Arg Tyr Ser Val Ile Met His Gly Gly Leu Cys Thr Arg Leu
 130 135 140
 Ala Ile Thr Ser Trp Val Ser Gly Ser Met Asn Ser Leu Met Gln Thr
 145 150 155 160
 Val Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
 165 170 175
 Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
 180 185 190
 Ser Ser Asn Glu Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
 195 200 205
 Thr Pro Phe Cys Leu Val Leu Ser Tyr Ile Gln Ile Ile Ser Thr
 210 215 220
 Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Lys Lys Ala Phe His Thr
 225 230 235 240
 Cys Ala Ser His Leu Thr Val Val Val Leu Cys Tyr Gly Met Ala Ile
 245 250 255
 Phe Thr Tyr Ile Gln Pro Arg Ser Ser Pro Ser Val Leu Gln Glu Lys
 260 265 270
 Leu Ile Ser Leu Phe Tyr Ser Val Leu Thr Pro Met Leu Asn Pro Met
 275 280 285
 Ile Tyr Ser Val Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
 290 295 300
 Leu Gly Gln Leu Thr Gly Ile Thr Ser Lys Leu Ala Thr
 305 310 315

<210> 2621

<211> 349

<212> PRT

<213> Unknown (3766130-dir-627-13 conceptual translation of range 62771-63818)

<220>

<221> VARIANT

<222> (1)...(349)

<223> Xaa = Any Amino Acid

<400>2621

```

Leu Leu Ile Leu His Phe His Asp Trp Leu Phe Leu His Leu Xaa Cys
 1           5           10           15
Gly Pro Trp Lys Leu Met Gly Gln Glu Asn Lys Asn Gln Thr Trp Val
          20           25           30
Ser Glu Phe Ile Leu Leu Gly Ile Ser Ser Asp Trp Gly Ile Gln Val
          35           40           45
Ser Leu Phe Ala Leu Ile Leu Ala Met Tyr Leu Val Thr Ile Leu Gly
          50           55           60
Asn Thr Leu Ile Leu Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
65           70           75           80
Pro Met Tyr Phe Ser Leu Ser Val Leu Ser Phe Val Asp Phe Cys Tyr
          85           90           95
Thr Lys Ser Ile Val Pro Gln Met Leu Ser His Leu Leu Ser Ala Arg
          100          105          110
Lys Ser Ile Pro Phe Tyr Ser Cys Val Leu Gln Leu Tyr Val Ser Leu
          115          120          125
Ala Leu Cys Gly Ser Glu Phe Phe Leu Leu Gly Ala Met Ala Tyr Asp
          130          135          140
Arg Tyr Val Ala Val Cys His Pro Leu His Tyr Thr Val Ile Met His
145          150          155          160
Gly Gly Leu Cys Leu Gly Leu Ala Ala Ser Arg Leu Val Ala Gly Phe
          165          170          175
Ser Asn Ser Leu Met Glu Thr Ile Ile Thr Phe Gln Leu Pro Val Ser
          180          185          190
Arg Phe Ile Asn His Phe Val Cys Glu Thr Leu Ala Val Leu Gln Leu
          195          200          205
Ala Cys Val Asp Val Pro Phe Asn Lys Val Met Val Ala Ile Ser Gly
          210          215          220
Phe Leu Val Ile Leu Leu Pro Cys Ser Leu Val Leu Phe Ser Tyr Ala
225          230          235          240
Cys Ile Val Ala Thr Ile Leu Cys Ile Arg Ser Thr Gln Val Arg Cys
          245          250          255
Lys Ala Phe Gly Thr Cys Ala Ser His Leu Ile Val Val Cys Met Cys
          260          265          270
Phe Gly Ala Thr Ile Cys Thr Tyr Leu Gly Pro Gln Leu Ala Ser Ser
          275          280          285
Ala Glu Glu Glu Lys Met Ile Ala Leu Phe Tyr Gly Val Val Ser Pro
          290          295          300
Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Ala
305          310          315          320
Ala Val Arg Lys Val Leu Glu Arg Cys Arg Xaa Arg Val Lys Thr Leu
          325          330          335
Arg Thr Ser Cys Tyr Leu Ser Ser Lys Pro Lys Arg Arg
          340          345

```

<210> 2622

<211> 214

<212> PRT

<213> Unknown (hg27-dir-0-8 conceptual translation of range 1-642)

<400>2622

```

Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu Val
 1           5           10           15
His Leu Leu Ser Arg Lys Lys Val Ile Val Phe Thr Leu Cys Ala Ala

```

```

      20      25      30
Arg Leu Leu Phe Leu Leu Ile Gly Gly Cys Thr Gln Cys Ala Leu Leu
      35      40      45
Gly Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
      50      55      60
Tyr Pro Asn Ile Met Thr Trp Lys Val Cys Val Gln Leu Ala Thr Ala
      65      70      75      80
Pro Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr Thr Phe Thr
      85      90      95
Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His Phe Trp Cys
      100      105      110
Glu Ala Pro Ala Leu Leu Ile Leu Ala Ser Thr Asp Thr His Ala Ser
      115      120      125
Glu Met Ala Ile Phe Leu Thr Gly Val Val Ile Leu Leu Ile Pro Val
      130      135      140
Phe Leu Ile Leu Val Ser Tyr Gly Arg Ile Ile Val Thr Val Val Lys
      145      150      155      160
Met Lys Ser Thr Val Gly Ser Leu Lys Ala Phe Ser Thr Cys Gly Ser
      165      170      175
His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile Ile Thr Tyr
      180      185      190
Met Thr Pro Lys Ser Ser Lys Gln Gln Glu Lys Ser Val Ser Val Phe
      195      200      205
Tyr Pro Ile Val Thr Pro
      210

```

<210> 2623

<211> 217

<212> PRT

<213> Unknown (p51-dir-0-8 conceptual translation of range 1-651)

<400>2623

```

Ser Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu
1      5      10      15
Val His Leu Leu Ser Arg Lys Lys Val Ile Ala Phe Thr Leu Cys Ala
      20      25      30
Ala Arg Leu Leu Phe Phe Leu Ile Phe Gly Cys Thr Gln Cys Ala Leu
      35      40      45
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
      50      55      60
Arg Tyr Pro Asp Ile Met Thr Trp Lys Val Cys Val Gln Leu Ala Thr
      65      70      75      80
Gly Ser Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr Thr Phe
      85      90      95
Thr Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His Phe Phe
      100      105      110
Cys Glu Ala Pro Ala Leu Leu Ile Leu Ala Ser Thr Asp Thr His Ala
      115      120      125
Ser Glu Met Ala Ile Phe Leu Thr Gly Val Val Leu Leu Ile Pro
      130      135      140
Val Phe Leu Ile Leu Val Ser Tyr Gly Arg Ile Ile Val Thr Val Val
      145      150      155      160
Lys Met Lys Ser Thr Val Gly Ser Leu Lys Ala Phe Ser Thr Cys Gly
      165      170      175
Ser His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile Ile Thr
      180      185      190
Tyr Met Thr Pro Lys Ser Ser Lys Gln Gln Glu Lys Ser Val Ser Val
      195      200      205
Phe Tyr Ala Ile Val Thr Pro Met Leu
      210      215

```

<210> 2624

<211> 158

<212> PRT

<213> Unknown (2564517-dir-0-6 conceptual translation of range 1-474)

<400>2624

```

Ile Ser Phe Pro Leu Arg Tyr Thr Ile Ile Met Ser Arg Ser Ile Cys
 1           5           10           15
Ile Thr Met Val Ser Cys Cys Trp Ile Ser Gly Ser Leu Ile Ala Leu
      20           25           30
Val Val Ile Val Phe Thr Leu Gln Leu Pro Leu Cys Gly Ala Asn Val
      35           40           45
Ile Asn His Phe Phe Cys Glu Ala Thr Thr Leu Val Gly Met Ala Cys
      50           55           60
Val Asp Thr Phe Val Thr Glu Met Val Ile Phe Ser Ala Gly Ile Phe
65           70           75           80
Thr Leu Leu Leu Pro Ser Ile Leu Thr Leu Leu Ser Tyr Ile Cys Ile
      85           90           95
Ile Val Ala Ile Val Gly Ile Arg Ser Ser Ala Gly Arg Tyr Lys Ala
      100          105          110
Phe Ser Thr Cys Ala Ser His Leu Ile Ile Val Thr Ile Phe Tyr Gly
      115          120          125
Thr Ala Ile Phe Gly Tyr Met Lys Pro Val Ser Lys Asn Ser Gly Asn
      130          135          140
Gln Asp Lys Met Thr Ser Val Phe Tyr Thr Val Thr Pro Pro
145          150          155

```

<210> 2625

<211> 215

<212> PRT

<213> Unknown (p102-dir-0-8 conceptual translation of range 2-646)

<400>2625

```

Phe Leu Asp Ile Cys Tyr Ile Ser Ala Ser Val Pro Gln Met Ile Val
 1           5           10           15
Asn Cys Leu Val Arg Ile Pro Ile Ile Ser Leu Gly Gln Cys Leu Ala
      20           25           30
Gln Met Cys Ala Gly Leu Tyr Leu Gly Val Val Glu Cys Leu Leu Leu
      35           40           45
Ala Val Met Ala Tyr Asp Arg Cys Ile Ala Ile Gly Asp Pro Leu Arg
      50           55           60
Tyr Ser Val Arg Met Gly Pro Gln Leu Cys Ala Gln Leu Ala Gly Ala
65           70           75           80
Ser Trp Val Ser Ala Phe Leu Leu Thr Val Val Pro Val Leu Thr Met
      85           90           95
Pro Leu Glu Phe Cys Gly Gln His Ile Ile Asn His Phe Ser Cys Glu
      100          105          110
Leu Leu Ala Val Leu Lys Leu Ala Cys Asn Asp Leu Trp Ile Tyr Glu
      115          120          125
Leu Leu Ile Met Val Thr Ser Ser Leu Thr Leu Leu Ala Pro Phe Ala
      130          135          140
Phe Ile Leu Ala Ser Tyr Gly Cys Ile Leu Gly Ala Val Leu Lys Met
145          150          155          160
His Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
      165          170          175
Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ala Ile Ser Met Tyr Met
      180          185          190
Met Pro Gln Asp Lys Ala Ser Arg Asp Lys Asp Lys Ile Ile Ser Met
      195          200          205
Leu Tyr Gly Ile Val Thr Pro
210          215

```

<210> 2626

<211> 217

<212> PRT

<213> Unknown (2921715-dir-0-8 conceptual translation of range 2-652)

<400>2626

```

Ile Ile Asp Ile Ser Tyr Ala Ser Asn Lys Val Pro Lys Met Leu Thr
 1           5           10           15
Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val Pro Cys Thr
      20           25           30
Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu Ile
      35           40           45
Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys His Pro Leu
      50           55           60
Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val Leu Ala Val
      65           70           75           80
Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val Leu
      85           90           95
Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Phe
      100          105          110
Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu
      115          120          125
Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu Val Gly Pro
      130          135          140
Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala Ala Ile Leu
      145          150          155          160
Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser
      165          170          175
Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met
      180          185          190
Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu
      195          200          205
Ser Leu Phe Tyr Ser Leu Phe Asn Pro
      210          215

```

<210> 2627

<211> 217

<212> PRT

<213> Unknown (2921709-dir-0-8 conceptual translation of range 2-652)

<400>2627

```

Ile Ile Asp Ile Ser Tyr Ala Ser Asn Asn Val Pro Lys Met Leu Thr
 1           5           10           15
Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val Pro Cys Thr
      20           25           30
Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu Ile
      35           40           45
Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys His Pro Leu
      50           55           60
Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val Leu Ala Val
      65           70           75           80
Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val Leu
      85           90           95
Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Phe
      100          105          110
Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu
      115          120          125
Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu Val Gly Pro
      130          135          140
Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala Ala Ile Leu

```

| | | | | | | |
|---|---|-----|-----|-----|-----|-----|
| 145 | | 150 | | 155 | | 160 |
| Gly Ile Gln Ser Gly | Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser | | | | | |
| | 165 | | 170 | | 175 | |
| Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met | | | | | | |
| | 180 | | 185 | | 190 | |
| Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu | | | | | | |
| | 195 | | 200 | | 205 | |
| Ser Leu Phe Tyr Ser Leu Phe Asn Pro | | | | | | |
| 210 | | 215 | | | | |

<210> 2628

<211> 157

<212> PRT

<213> Unknown (902194-dir-0-6 conceptual translation of range 2-472)

<400>2628

| | | | | | | |
|---|-----|-----|-----|--|--|--|
| Ile Cys His Pro Leu His Tyr Ser Val Ile Met Ser Trp Arg Val Cys | | | | | | |
| 1 | 5 | 10 | 15 | | | |
| Thr Val Gln Ala Val Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu | | | | | | |
| | 20 | 25 | 30 | | | |
| Val His Val Ile Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu | | | | | | |
| | 35 | 40 | 45 | | | |
| Ile Asn His Phe Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys | | | | | | |
| | 50 | 55 | 60 | | | |
| Ala Asp Thr Arg Leu Asn Gln Val Val Ile Phe Ala Ala Ser Val Ser | | | | | | |
| 65 | 70 | 75 | 80 | | | |
| Ile Leu Val Gly Pro Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile | | | | | | |
| | 85 | 90 | 95 | | | |
| Leu Phe Ala Ile Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala | | | | | | |
| | 100 | 105 | 110 | | | |
| Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly | | | | | | |
| | 115 | 120 | 125 | | | |
| Ser Ala Ile Val Met Tyr Met Ala Pro Lys Ser Asn His Pro Glu Glu | | | | | | |
| | 130 | 135 | 140 | | | |
| Gln Gln Lys Ile Leu Ser Leu Phe Tyr Ser Leu Phe Asn | | | | | | |
| 145 | 150 | 155 | | | | |

<210> 2629

<211> 215

<212> PRT

<213> Unknown (OST182-dir-0-8 conceptual translation of range 2-646)

<400>2629

| | | | | | | |
|---|-----|-----|-----|--|--|--|
| Ile Val Asp Ile Ser Tyr Ala Ser Asn Tyr Val Pro Lys Met Leu Thr | | | | | | |
| 1 | 5 | 10 | 15 | | | |
| Asn Leu Met Asn Gln Glu Ser Thr Ile Ser Phe Phe Pro Cys Ile Met | | | | | | |
| | 20 | 25 | 30 | | | |
| Gln Thr Phe Leu Tyr Leu Ala Phe Ala His Val Glu Cys Leu Ile Leu | | | | | | |
| | 35 | 40 | 45 | | | |
| Val Val Met Ser Tyr Asp Arg Tyr Ala Asp Ile Cys His Pro Leu Arg | | | | | | |
| | 50 | 55 | 60 | | | |
| Tyr Asn Ile Leu Met Ser Trp Arg Val Cys Thr Val Leu Ala Val Ala | | | | | | |
| 65 | 70 | 75 | 80 | | | |
| Ser Trp Val Phe Ser Phe Leu Leu Ala Leu Val Pro Leu Val Leu Ile | | | | | | |
| | 85 | 90 | 95 | | | |
| Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Cys Glu | | | | | | |
| | 100 | 105 | 110 | | | |
| Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu Asn Gln | | | | | | |
| | 115 | 120 | 125 | | | |
| Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly Pro Leu Cys | | | | | | |
| | 130 | 135 | 140 | | | |

Leu Val Leu Val Ser Tyr Leu Arg Ile Leu Ala Ala Ile Leu Arg Ile
 145 150 155 160
 Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser Ser His
 165 170 175
 Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val Thr Tyr Met
 180 185 190
 Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu Ser Leu
 195 200 205
 Phe Tyr Ser Leu Phe Asn Pro
 210 215

<210> 2630

<211> 352

<212> PRT

<213> Unknown (4156187-rev-1021-13 conceptual translation of range 102238-103293)

<220>

<221> VARIANT

<222> (1)...(352)

<223> Xaa = Any Amino Acid

<400>2630

Leu Leu Val Phe Cys Leu Phe Leu Cys Leu Phe Phe Ser Ser Glu Met
 1 5 10 15
 Val Lys Asn Gln Thr Met Val Thr Glu Phe Leu Leu Leu Gly Phe Leu
 20 25 30
 Leu Gly Pro Arg Ile Gln Met Leu Phe Gly Leu Phe Ser Leu Phe
 35 40 45
 Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile Ser
 50 55 60
 Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu
 65 70 75 80
 Ala Val Val Asn Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Met Leu
 85 90 95
 Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Cys Met
 100 105 110
 Thr Xaa Thr Phe Leu Phe Leu Ser Phe Ala His Thr Glu Cys Leu Leu
 115 120 125
 Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
 130 135 140
 Arg Tyr Phe Ile Ile Met Thr Trp Lys Val Cys Ile Thr Leu Ala Ile
 145 150 155 160
 Thr Ser Trp Thr Cys Gly Ser Leu Leu Ala Met Val His Val Ser Leu
 165 170 175
 Ile Leu Arg Leu Pro Phe Cys Gly Pro Arg Glu Ile Asn His Phe Phe
 180 185 190
 Cys Glu Ile Leu Ser Val Leu Arg Leu Ala Cys Ala Asp Thr Trp Leu
 195 200 205
 Asn Gln Val Val Ile Phe Ala Ala Cys Met Phe Ile Leu Val Gly Pro
 210 215 220
 Leu Cys Leu Val Leu Val Ser Tyr Ser His Ile Leu Ala Ala Ile Leu
 225 230 235 240
 Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser
 245 250 255
 Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met
 260 265 270
 Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu
 275 280 285
 Phe Leu Phe Tyr Ser Ser Phe Asn Pro Met Leu Asn Pro Leu Ile Tyr
 290 295 300

Asn Leu Arg Asn Val Glu Val Lys Gly Ala Leu Arg Arg Ala Leu Cys
 305 310 315 320
 Lys Glu Ser His Ser Xaa Glu Val Xaa His Leu Asn Cys Gln Pro Gln
 325 330 335
 Leu Ser Arg Gly Leu Leu Met Pro Asn Tyr Cys Leu Asn Pro Glu Lys
 340 345 350

<210> 2631

<211> 314

<212> PRT

<213> Unknown (4156187-rev-834-13 conceptual translation of range 83640-84581)

<220>

<221> VARIANT

<222> (1)...(314)

<223> Xaa = Any Amino Acid

<400>2631

Glu Met Gly Glu Asn Gln Thr Met Val Thr Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Phe Leu Leu Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser
 20 25 30
 Leu Phe Tyr Ile Phe Thr Leu Leu Gly Asn Gly Ala Ile Leu Gly Leu
 35 40 45
 Ile Ser Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 His Leu Ala Val Val Asp Ile Ala Tyr Thr Arg Asn Thr Val Pro Gln
 65 70 75 80
 Met Leu Ala Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly
 85 90 95
 Cys Met Thr Gln Thr Phe Leu Cys Leu Ser Phe Gly His Ser Glu Cys
 100 105 110
 Leu Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His
 115 120 125
 Pro Leu Arg Tyr Ser Val Ile Met Thr Trp Arg Val Cys Ile Thr Leu
 130 135 140
 Ala Val Thr Ser Trp Thr Cys Gly Ser Leu Leu Ala Leu Ala His Val
 145 150 155 160
 Val Leu Ile Leu Arg Leu Pro Phe Ser Gly Pro His Glu Ile Asn His
 165 170 175
 Phe Phe Cys Glu Ile Leu Ser Val Leu Arg Leu Ala Cys Ala Asp Thr
 180 185 190
 Trp Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Phe Leu Val
 195 200 205
 Gly Pro Pro Ser Leu Val Leu Val Ser Tyr Ser His Ile Leu Ala Ala
 210 215 220
 Ile Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile
 245 250 255
 Ile Met Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Lys
 260 265 270
 Val Phe Phe Leu Phe Tyr Ser Phe Phe Asn Pro Thr Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Leu Arg Asn Gly Glu Val Lys Gly Ala Leu Arg Arg Ala
 290 295 300
 Leu Gly Lys Glu Ser His Ser Xaa Leu Val
 305 310

<210> 2632

<211> 223

<212> PRT

<213> Unknown (3983369-dir-0-8 conceptual translation of range 1-669)

<400>2632

```

Ser His Leu Ala Ile Val Asp Met Ala Tyr Ala Cys Asn Thr Val Pro
1          5          10          15
Gln Thr Leu Ile Asn Leu Leu Asp Glu Thr Arg Pro Ile Thr Phe Ala
20          25          30
Gly Cys Met Thr Gln Thr Tyr Leu Phe Leu Thr Phe Ala Ile Thr Glu
35          40          45
Cys Leu Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys
50          55          60
His Pro Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile
65          70          75          80
Met Ala Ala Val Ser Trp Ile Val Ser Phe Leu Leu Ser Leu Val His
85          90          95
Leu Leu Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn
100         105         110
His Phe Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp
115         120         125
Thr Thr Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Thr Leu
130         135         140
Val Gly Pro Leu Cys Phe Val Leu Val Ser Tyr Thr Arg Ile Leu Val
145         150         155         160
Ala Ile Leu Arg Ile Gln Ser Gly Glu Arg Arg Arg Lys Ala Phe Ser
165         170         175
Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala
180         185         190
Ile Val Met Tyr Met Ala Pro Lys Ser Gln His Pro Gly Glu Gln Gln
195         200         205
Lys Ile Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn
210         215         220

```

<210> 2633

<211> 216

<212> PRT

<213> Unknown (OST008-dir-0-8 conceptual translation of range 2-649)

<400>2633

```

Ile Ile Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met Leu Ala
1          5          10          15
Asn Leu Met Asn Gln Lys Arg Thr Ile Ser Phe Val Pro Cys Ile Met
20          25          30
Gln Thr Phe Leu Tyr Leu Ala Phe Ala Val Thr Glu Cys Leu Ile Leu
35          40          45
Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Phe Gln
50          55          60
Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Leu Val Leu Thr
65          70          75          80
Ser Trp Ser Cys Gly Phe Ala Leu Ser Leu Val His Glu Ile Leu Leu
85          90          95
Leu Arg Leu Pro Phe Cys Gly Pro Arg Asp Val Asn His Leu Phe Cys
100         105         110
Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Val Asn
115         120         125
Gln Val Val Ile Phe Ala Thr Cys Val Phe Val Leu Val Gly Pro Leu
130         135         140
Ser Leu Ile Leu Val Ser Tyr Met His Ile Leu Gly Ala Ile Leu Lys
145         150         155         160
Ile Gln Thr Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr Cys Ser Ser

```

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| | | | | 165 | | | | | 170 | | | | | 175 | | | | | |
| His | Leu | Cys | Val | Val | Gly | Leu | Phe | Phe | Gly | Ile | Ala | Met | Val | Val | Tyr | | | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | | | |
| Met | Val | Pro | Asp | Ser | Asn | Gln | Arg | Glu | Glu | Gln | Glu | Lys | Met | Leu | Ser | | | | |
| | | 195 | | | | | 200 | | | | | 205 | | | | | | | |
| Leu | Phe | His | Ser | Val | Leu | Asn | Pro | | | | | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | | | | | |

<210> 2634

<211> 310

<212> PRT

<213> Unknown (4156187-dir-87-12 conceptual translation of range 8841-9771)

<400>2634

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Met | Gly | Asp | Asn | Gln | Ser | Arg | Val | Thr | Glu | Phe | Ile | Leu | Val | Gly | Phe | | | | |
| 1 | | | 5 | | | | | 10 | | | | | 15 | | | | | | |
| Gln | Leu | Ser | Val | Glu | Met | Glu | Val | Leu | Leu | Phe | Trp | Ile | Phe | Ser | Leu | | | | |
| | | 20 | | | | | 25 | | | | | 30 | | | | | | | |
| Leu | Tyr | Leu | Phe | Ser | Leu | Leu | Ala | Asn | Gly | Met | Ile | Leu | Gly | Leu | Ile | | | | |
| | 35 | | | | | 40 | | | | | 45 | | | | | | | | |
| Cys | Leu | Asp | Pro | Arg | Leu | Arg | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ser | His | | | | |
| | 50 | | | | 55 | | | | | 60 | | | | | | | | | |
| Leu | Ala | Val | Ile | Asp | Ile | Tyr | Tyr | Ala | Ser | Ser | Asn | Leu | Leu | Asn | Met | | | | |
| 65 | | | | 70 | | | | 75 | | | | | | 80 | | | | | |
| Leu | Glu | Asn | Leu | Val | Lys | His | Lys | Lys | Asn | Tyr | Pro | Phe | Ile | Ser | Cys | | | | |
| | | 85 | | | | | 90 | | | | | | 95 | | | | | | |
| Ile | Met | Gln | Met | Ala | Leu | Tyr | Leu | Thr | Phe | Ala | Ala | Ala | Val | Cys | Met | | | | |
| | | 100 | | | | | 105 | | | | | | 110 | | | | | | |
| Ile | Leu | Val | Val | Met | Ser | Tyr | Asp | Arg | Phe | Val | Ala | Ile | Cys | His | Pro | | | | |
| | 115 | | | | | 120 | | | | | | 125 | | | | | | | |
| Leu | His | Tyr | Thr | Val | Ile | Met | Asn | Trp | Arg | Val | Cys | Thr | Val | Leu | Ala | | | | |
| | 130 | | | | 135 | | | | | | 140 | | | | | | | | |
| Ile | Thr | Ser | Trp | Ala | Cys | Gly | Phe | Ser | Leu | Ala | Leu | Ile | Asn | Leu | Ile | | | | |
| 145 | | | | 150 | | | | | 155 | | | | | 160 | | | | | |
| Leu | Leu | Leu | Arg | Leu | Pro | Phe | Cys | Gly | Pro | Gln | Glu | Val | Asn | His | Phe | | | | |
| | | 165 | | | | | 170 | | | | | | 175 | | | | | | |
| Phe | Gly | Glu | Ile | Leu | Ser | Val | Leu | Lys | Leu | Ala | Cys | Ala | Asp | Thr | Trp | | | | |
| | 180 | | | | | 185 | | | | | | | 190 | | | | | | |
| Ile | Asn | Glu | Ile | Phe | Val | Phe | Ala | Gly | Gly | Val | Phe | Val | Leu | Val | Gly | | | | |
| | 195 | | | | | 200 | | | | | | 205 | | | | | | | |
| Pro | Leu | Ser | Leu | Met | Leu | Ile | Ser | Tyr | Met | Arg | Ile | Leu | Leu | Ala | Ile | | | | |
| | 210 | | | | 215 | | | | | 220 | | | | | | | | | |
| Leu | Lys | Ile | Gln | Ser | Lys | Glu | Gly | Arg | Lys | Lys | Ala | Phe | Ser | Thr | Cys | | | | |
| 225 | | | | 230 | | | | | 235 | | | | | 240 | | | | | |
| Ser | Ser | His | Leu | Cys | Val | Val | Gly | Leu | Tyr | Phe | Gly | Met | Ala | Met | Val | | | | |
| | | 245 | | | | | 250 | | | | | | 255 | | | | | | |
| Val | Tyr | Leu | Val | Pro | Asp | Asn | Ser | Gln | Arg | Gln | Lys | Gln | Gln | Lys | Ile | | | | |
| | 260 | | | | | | 265 | | | | | | 270 | | | | | | |
| Leu | Thr | Leu | Phe | Tyr | Ser | Leu | Phe | Asn | Pro | Leu | Leu | Asn | Pro | Leu | Ile | | | | |
| | 275 | | | | | 280 | | | | | | 285 | | | | | | | |
| Tyr | Ser | Leu | Arg | Asn | Ala | Gln | Val | Lys | Gly | Ala | Leu | Tyr | Arg | Ala | Leu | | | | |
| | 290 | | | | | 295 | | | | | | 300 | | | | | | | |
| Gln | Lys | Lys | Arg | Thr | Met | | | | | | | | | | | | | | |
| 305 | | | | | 310 | | | | | | | | | | | | | | |

<210> 2635

<211> 339

<212> PRT

<213> Unknown (4156187-rev-1102-12 conceptual translation of range 110295-111311)

<220>

<221> VARIANT

<222> (1)...(339)

<223> Xaa = Any Amino Acid

<400>2635

```

Ile Cys Phe Xaa Thr Leu Leu Leu Asn His Glu His Xaa Leu Asp Phe
 1           5           10           15
Leu Cys His Arg Asp Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe
          20           25           30
Leu Leu Leu Gly Phe Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe
          35           40           45
Gly Leu Phe Ser Leu Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr
          50           55           60
Ile Leu Gly Leu Ile Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr
65           70           75           80
Phe Phe Leu Ser His Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn
          85           90           95
Thr Val Pro Arg Met Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile
          100          105          110
Ser Phe Ala Gly Arg Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala
          115          120          125
Val Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val
          130          135          140
Ala Ile Cys His Pro Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val
145          150          155          160
Cys Ile Thr Leu Ala Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser
          165          170          175
Leu Ile His Leu Val Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln
          180          185          190
Lys Ile Tyr His Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala
          195          200          205
Cys Ala Asp Thr His Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile
          210          215          220
Ser Gly Leu Val Gly Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys
225          230          235          240
Ile Leu Cys Ala Ile Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys
          245          250          255
Ala Phe Cys Thr Cys Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr
          260          265          270
Gly Thr Ala Ile Ile Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys
          275          280          285
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met
          290          295          300
Leu Asn Pro Leu Ile Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr
305          310          315          320
Leu Lys Arg Val Leu Gly Val Glu Arg Ala Leu Xaa Lys Gly Leu Trp
          325          330          335
His Cys Asp

```

<210> 2636

<211> 339

<212> PRT

<213> Unknown (4156166-dir-1014-13 conceptual translation of range 101536-102552)

<220>

<221> VARIANT

<222> (1)...(339)

<223> Xaa = Any Amino Acid

<400>2636

```

Ile Cys Phe Xaa Thr Leu Leu Leu Asn His Glu His Xaa Leu Asp Phe
 1           5           10           15
Leu Cys His Arg Asp Met Gly Asp Asn Ile Thr Ser Ile Arg Glu Phe
          20           25           30
Leu Leu Leu Gly Phe Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe
          35           40           45
Gly Leu Phe Ser Leu Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr
          50           55           60
Ile Leu Gly Leu Ile Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr
65           70           75           80
Phe Phe Leu Ser His Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn
          85           90           95
Thr Val Pro Arg Met Leu Val Asn Leu His Pro Ala Lys Pro Ile
          100          105          110
Ser Phe Ala Gly Arg Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala
          115          120          125
Val Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val
          130          135          140
Ala Ile Cys His Pro Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val
145          150          155          160
Cys Ile Thr Leu Ala Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser
          165          170          175
Leu Ile His Leu Val Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln
          180          185          190
Lys Ile Tyr His Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala
          195          200          205
Cys Ala Asp Thr His Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile
          210          215          220
Ser Gly Leu Val Gly Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys
225          230          235          240
Ile Leu Cys Ala Ile Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys
          245          250          255
Ala Phe Arg Thr Cys Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr
          260          265          270
Gly Thr Ala Ile Ile Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys
          275          280          285
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met
          290          295          300
Leu Asn Pro Leu Ile Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr
305          310          315          320
Leu Lys Arg Val Leu Gly Val Glu Arg Ala Leu Xaa Lys Gly Leu Trp
          325          330          335
His Cys Asp

```

<210> 2637

<211> 222

<212> PRT

<213> Unknown (293753-dir-0-8 conceptual translation of range 2-667)

<400>2637

```

Phe Phe Leu Ser His Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn
 1           5           10           15
Thr Val Pro Gln Met Leu Val Asn Leu Asp Pro Val Lys Pro Ile
          20           25           30
Ser Tyr Ala Gly Cys Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala
          35           40           45
Ile Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val
          50           55           60

```

```

Ala Ile Cys His Pro Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val
65          70          75          80
Cys Ser Thr Met Ala Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser
          85          90          95
Leu Ile His Leu Val Leu Leu Leu Pro Leu Pro Phe Cys Val Ser Gln
          100         105         110
Lys Val Asn His Phe Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala
          115         120         125
Cys Ala Asp Thr His Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val
          130         135         140
Ser Val Leu Val Gly Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys
145          150          155          160
Ile Leu Gly Ala Ile Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys
          165         170         175
Ala Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr
          180         185         190
Gly Thr Ala Ile Val Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys
          195         200         205
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn
          210         215         220

```

<210> 2638

<211> 114

<212> PRT

<213> Unknown (892-dir-0-5 conceptual translation of range 2-343)

<400>2638

```

Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Ser Arg Trp Met Cys
1          5          10          15
Leu Leu Met Val Gly Ile Cys Gly Val Tyr Gly Val Val Gly Ser Leu
          20         25         30
Cys Tyr Thr Phe Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Asn Glu
          35         40         45
Ile Asp His Tyr Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys
          50         55         60
Ala Asp Thr Ser Leu Asn Asp Leu Val Asp Phe Ile Thr Gly Phe Asn
65          70          75          80
Val Ile Val Val Pro Leu Thr Leu Val Val Ile Val Tyr Ala Asn Ile
          85         90         95
Phe Ala Thr Ile Met Lys Ile Arg Ser Ala Gln Gly Gln Ile Lys Ala
          100        105        110
Phe Ser

```

<210> 2639

<211> 350

<212> PRT

<213> Unknown (2331266-dir-0-13 conceptual translation of range 111-1160)

<220>

<221> VARIANT

<222> (1)...(350)

<223> Xaa = Any Amino Acid

<400>2639

```

Leu Ala Gln Asn Ile Lys Arg Lys Thr Ala Met Asn Ser Val Asn Ala
1          5          10          15
Ser Phe Tyr Gln Asn Ile Ser Ile Val Arg Pro Glu Tyr Phe Phe Ile
          20         25         30
Ser Gly Leu Ser Gly Ile Pro Tyr Ser Ser Tyr Tyr Tyr Ile Phe Leu
          35         40         45

```

Phe Val Val Tyr Phe Ile Ser Val Ile Gly Asn Ser Val Val Leu Leu
 50 55 60
 Ile Ile Ala Val Asp Arg Ser Leu His Ser Pro Lys Tyr Ile Gly Val
 65 70 75 80
 Phe Asn Leu Ala Leu Ala Asp Ile Gly Glu Thr Asn Ala Leu Ile Pro
 85 90 95
 Asn Met Met Lys Thr Phe Leu Phe Asn Ser Gln Tyr Ile Ser Tyr Asn
 100 105 110
 Gly Cys Met Ala Asn Met Phe Phe Val Val Leu Phe Asn Ser Ile Gln
 115 120 125
 Ser Phe Thr Leu Val Ala Leu Ala Tyr Asp Arg Phe Ile Ala Ile Cys
 130 135 140
 Leu Pro Leu Arg Tyr His Ala Ile Val Asn Asn Thr Ser Met Ile Leu
 145 150 155 160
 Ile Phe Leu Ala Ile Trp Ala Phe Asn Ser Ser Val Val Ala Ser Met
 165 170 175
 Val Ser Met Ile Thr Arg Leu Ser Ile Cys Lys Ser Asn Val Ile Pro
 180 185 190
 Ser Tyr Phe Cys Asp His Gly Pro Ile Phe Arg Leu Ala Cys Asn Asp
 195 200 205
 Ile Lys Ile Asn Glu Phe Phe Ala Phe Phe Ile Ser Ile Leu Tyr Leu
 210 215 220
 Thr Met Pro Met Val Ile Ile Ala Leu Ser Tyr Leu Asn Ile Phe Leu
 225 230 235 240
 Ala Leu Ile Lys Ile Thr Thr Trp Glu Gly Arg Leu Lys Ala Leu Lys
 245 250 255
 Thr Cys Val Ser His Leu Leu Leu Val Gly Ile Phe Phe Leu Pro Leu
 260 265 270
 Leu Cys Thr Tyr Ile Ala Gln Val Leu Leu Ala Leu Thr Pro Asn Ala
 275 280 285
 Arg Val Ile Ser Thr Ser Leu Ser Tyr Ala Ile Pro Pro Met Leu Asn
 290 295 300
 Pro Ile Ile Tyr Val Leu Asn Thr Ala Glu Ile Lys Tyr Ile Ile Arg
 305 310 315 320
 Lys Leu Phe Lys Arg Arg Leu Arg Ser Val Ser Asp Asn Ile Ser Lys
 325 330 335
 Xaa Phe Cys Ser Cys Trp Gly Leu Tyr Gln Ser Lys Lys Lys
 340 345 350

<210> 2640

<211> 353

<212> PRT

<213> Unknown (2331262-dir-1-13 conceptual translation of range 199-1257)

<220>

<221> VARIANT

<222> (1)...(353)

<223> Xaa = Any Amino Acid

<400>2640

Val Gln Asn Thr Lys Cys Lys Val Ala Met Ser Ser Leu Asn Ala Ser
 1 5 10 15
 Phe Ser Leu Asn Ile Ser Val Val Arg Pro Glu Tyr Phe Phe Ile Leu
 20 25 30
 Gly Leu Ser Gly Ile Pro Tyr Ser Asn Leu Tyr Tyr Ile Phe Ile Phe
 35 40 45
 Ile Ile Tyr Phe Ile Thr Val Ile Gly Asn Phe Leu Val Ile Leu Leu
 50 55 60
 Ile Val Leu Asp Arg Ser Leu His Ser Pro Lys Tyr Ile Gly Val Phe
 65 70 75 80
 Asn Leu Ala Leu Ala Asp Ile Gly Glu Thr Asn Ala Leu Ile Pro Asn

| | | | | | | | | | | | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----|
| Leu 1 | Ser | Pro | Ser | Leu 5 | Lys | Pro | Ser | Cys | Asn 10 | Cys | Asp | Pro | Thr | Met 15 | Trp |
| Pro | Asn | Ser | Ser 20 | Asp | Ala | Pro | Phe | Leu 25 | Leu | Thr | Gly | Phe | Leu 30 | Gly | Leu |
| Glu | Met | Ile 35 | His | His | Trp | Ile | Ser 40 | Ile | Pro | Phe | Phe | Val 45 | Ile | Tyr | Phe |
| Ser | Ile 50 | Ile | Val | Gly | Asn 55 | Gly | Thr | Leu | Leu | Phe | Ile 60 | Ile | Trp | Ser | Asp |
| His 65 | Ser | Leu | His | Glu | Pro 70 | Met | Tyr | Tyr | Phe | Leu 75 | Ala | Val | Leu | Ala | Ser |
| Met | Asp | Leu | Gly | Met 85 | Thr | Leu | Thr | Thr | Met 90 | Pro | Thr | Val | Leu 95 | Gly | Val |
| Leu | Val | Leu | Asn | Gln | Arg | Glu | Ile | Val | His | Gly | Ala | Cys | Phe | Ile | Gln |

```
<210> 2642
<211> 159
<212> PRT
<213> Unknown (4680279-dir-0-6 conceptual translation of range 2-478)
```

<210> 2643
<211> 160

<212> PRT

<213> Unknown (902668-dir-0-6 conceptual translation of range 2-481)

<400>2643

```

Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn Asn Val Ile
 1           5           10           15
Ile Arg Ile Gly Val Ala Ile Thr Thr Arg Ala Thr Leu Ser Leu Leu
      20           25           30
Pro Leu Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro Gly Lys Ile
      35           40           45
Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met Lys Leu Ala
      50           55           60
Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr Val Val Leu
      65           70           75           80
Ser Thr Val Gly Ile Asp Ser Leu Leu Ile Val Met Ser Tyr Ser Leu
      85           90           95
Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu Arg Val Arg
      100          105          110
Thr Leu Asn Thr Cys Val Ser His Ile Ser Ala Val Leu Val Phe Tyr
      115          120          125
Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly Lys His Leu
      130          135          140
Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu Val Val Pro
      145          150          155          160

```

<210> 2644

<211> 316

<212> PRT

<213> Unknown (3927807-dir-288-13 conceptual translation of range 29007-29954)

<400>2644

```

Leu Asn Met Tyr Pro Arg Asn Ser Ser Gln Ala Gln Pro Phe Leu Leu
 1           5           10           15
Ala Gly Leu Pro Gly Met Ala Gln Phe His His Trp Val Phe Leu Pro
      20           25           30
Phe Gly Leu Met Tyr Leu Val Ala Val Leu Gly Asn Gly Thr Ile Leu
      35           40           45
Leu Val Val Arg Val His Arg Gln Leu His Gln Pro Met Tyr Tyr Phe
      50           55           60
Leu Leu Met Leu Ala Thr Thr Asp Leu Gly Leu Thr Leu Ser Thr Leu
      65           70           75           80
Pro Thr Val Leu Arg Val Phe Trp Leu Gly Ala Met Glu Ile Ser Phe
      85           90           95
Pro Ala Cys Leu Ile Gln Met Phe Cys Ile His Val Phe Ser Phe Met
      100          105          110
Glu Ser Ser Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
      115          120          125
Cys Cys Pro Leu Arg Tyr Ser Ser Ile Leu Thr Gly Ala Arg Val Ala
      130          135          140
Gln Ile Gly Leu Gly Ile Ile Cys Arg Cys Thr Leu Ser Leu Leu Pro
      145          150          155          160
Leu Ile Cys Leu Leu Thr Trp Leu Pro Phe Cys Arg Ser His Val Leu
      165          170          175
Ser His Pro Tyr Cys Leu His Gln Asp Ile Ile Arg Leu Ala Cys Thr
      180          185          190
Asp Ala Thr Leu Asn Ser Leu Tyr Gly Leu Ile Leu Val Leu Val Ala
      195          200          205
Ile Leu Asp Phe Val Leu Ile Ala Leu Ser Tyr Ile Met Ile Phe Arg
      210          215          220
Thr Val Leu Gly Ile Thr Ser Lys Glu Glu Gln Thr Lys Ala Leu Asn

```

| | | | | | | |
|---------------------|-----------------|---------------------|-----------------|-----|--|-----|
| 225 | | 230 | | 235 | | 240 |
| Thr Cys Val Ser His | Phe Cys Ala Val | Leu Ile Phe Tyr Ile | Pro Leu | | | |
| | 245 | 250 | 255 | | | |
| Ala Gly Leu Ser Ile | Ile His Arg Tyr | Gly Arg Asn Ala | Pro Pro Ile | | | |
| | 260 | 265 | 270 | | | |
| Ser His Ala Val Met | Ala Asn Val Tyr | Leu Phe Val | Pro Pro Ile Leu | | | |
| | 275 | 280 | 285 | | | |
| Asn Pro Val Leu Tyr | Ser Met Lys Ser | Lys Ala Ile | Cys Lys Gly Leu | | | |
| | 290 | 295 | 300 | | | |
| Leu Arg Leu Leu Cys | Gln Arg Ala Ala | Trp Pro Gly | | | | |
| 305 | 310 | 315 | | | | |

<210> 2645

<211> 316

<212> PRT

<213> Unknown (4761596-dir-254-13 conceptual translation of range 25614-26561)

<400>2645

| | | | |
|---------------------|-----------------|-----------------|-------------|
| Phe His Asn Asp Thr | Asn Pro Gln Asp | Val Trp Tyr Val | Leu Ile Gly |
| 1 | 5 | 10 | 15 |
| Ile Pro Gly Leu Glu | Asp Leu His Ser | Trp Ile Ala Ile | Pro Ile Cys |
| | 20 | 25 | 30 |
| Ser Met Tyr Ile Val | Ala Val Ile Gly | Asn Val Leu Leu | Ile Phe Leu |
| | 35 | 40 | 45 |
| Ile Val Thr Glu Arg | Ser Leu His Glu | Pro Met Tyr Phe | Phe Leu Ser |
| | 50 | 55 | 60 |
| Met Leu Ala Leu Ala | Asp Leu Leu Ser | Thr Ala Thr Ala | Pro Lys |
| 65 | 70 | 75 | 80 |
| Met Leu Ala Ile Phe | Trp Phe His Ser | Arg Gly Ile Ser | Phe Gly Ser |
| | 85 | 90 | 95 |
| Cys Val Ser Gln Met | Phe Phe Ile His | Phe Ile Phe Val | Ala Glu Ser |
| | 100 | 105 | 110 |
| Ala Ile Leu Leu Ala | Met Ala Phe Asp | Arg Tyr Val Ala | Ile Cys Tyr |
| | 115 | 120 | 125 |
| Pro Leu Arg Tyr Thr | Thr Ile Leu Thr | Ser Ser Val Ile | Gly Lys Ile |
| | 130 | 135 | 140 |
| Gly Thr Ala Ala Val | Val Arg Ser Phe | Leu Ile Cys Phe | Pro Phe Ile |
| 145 | 150 | 155 | 160 |
| Phe Leu Val Tyr Arg | Leu Leu Tyr Cys | Gly Lys His Ile | Ile Pro His |
| | 165 | 170 | 175 |
| Ser Tyr Cys Glu His | Met Gly Ile Ala | Arg Leu Ala Cys | Asp Asn Ile |
| | 180 | 185 | 190 |
| Thr Val Asn Ile Ile | Tyr Gly Leu Thr | Met Ala Leu Leu | Ser Thr Gly |
| | 195 | 200 | 205 |
| Leu Asp Ile Leu Leu | Ile Ile Ile Ser | Tyr Thr Met Ile | Leu Arg Thr |
| | 210 | 215 | 220 |
| Val Phe Gln Ile Pro | Ser Trp Ala Ala | Arg Tyr Lys Ala | Leu Asn Thr |
| 225 | 230 | 235 | 240 |
| Cys Gly Ser His Ile | Cys Val Ile Leu | Leu Phe Tyr Thr | Pro Ala Phe |
| | 245 | 250 | 255 |
| Phe Ser Phe Phe Ala | His Arg Phe Gly | Gly Lys Thr Val | Pro Arg His |
| | 260 | 265 | 270 |
| Ile His Ile Leu Val | Ala Asn Leu Tyr | Val Val Val Pro | Pro Met Leu |
| | 275 | 280 | 285 |
| Asn Pro Ile Ile Tyr | Gly Val Lys Thr | Lys Gln Ile Gln | Asp Arg Val |
| | 290 | 295 | 300 |
| Val Phe Leu Phe Ser | Ser Val Ser Thr | Cys Gln His | |
| 305 | 310 | 315 | |

<210> 2646

<211> 159

<212> PRT

<213> Unknown (2564519-dir-0-6 conceptual translation of range 1-477)

<400>2646

```

Ile Cys Asn Pro Leu Arg Tyr Ala Val Met Leu Thr Asn Ile Val Ile
 1              5              10              15
Arg Lys Ile Ala Ile Leu Ala Val Val Arg Gly Leu Cys Val Val Ala
      20              25              30
Pro Phe Thr Phe Leu Leu His Arg Leu Pro Tyr Cys Gln Asn Asn Val
      35              40              45
Val Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Lys Leu Ala Cys
      50              55              60
Ala Asp Val Thr Val Asn Ser Val Tyr Gly Leu Thr Ile Ala Leu Ser
65              70              75              80
Ile Thr Gly Leu Asp Ala Ala Leu Val Val Ala Ser Tyr Val Leu Ile
      85              90              95
Leu Arg Ala Val Leu Asn Met Asn Ser Met Thr Ala Arg His Lys Ala
      100             105             110
Leu Ser Thr Cys Ala Ser His Val Cys Val Ile Ile Leu Phe Cys Val
      115             120             125
Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Lys Asn Ile Pro
      130             135             140
Leu Asn Val His Ile Phe Val Ala Asn Leu Tyr Ile Leu Leu Pro
145              150              155

```

<210> 2647

<211> 158

<212> PRT

<213> Unknown (1644474-dir-0-6 conceptual translation of range 1-474)

<400>2647

```

Lys Pro Leu His Tyr Asn Glu Ile Met Asn Ser Ser Met Phe Leu Lys
 1              5              10              15
Leu Phe Leu Phe Thr Leu Ile Arg Ser Gly Thr Ile Met Ser Thr Leu
      20              25              30
Val Ala Leu Ala Ser Pro Leu Ser Phe Cys Gly Ser Asn Val Ile Tyr
      35              40              45
His Cys Tyr Cys Asp His Met Ala Leu Val Ser Leu Ala Cys Asp Ser
      50              55              60
Ile Ala Gln Asn Gln Thr Met Gly Leu Ile Val Ile Ile Cys Phe Val
65              70              75              80
Gly Ile Asp Thr Ser Val Ile Phe Phe Ser Tyr Val Lys Ile Leu His
      85              90              95
Val Val Leu Gly Thr Ala Ala Gly Glu Asp Arg Trp Lys Ala Phe His
      100             105             110
Thr Cys Gly Thr His Leu Met Val Met Ile Cys Phe Tyr Phe Val Gly
      115             120             125
Ser Val Thr Phe Leu Ser Arg Asn Leu Asn Ile Pro Ile Pro Ile Asp
      130             135             140
Val Asn Thr Phe Leu Gly Val Met Tyr Ile Val Phe Pro Ala
145              150              155

```

<210> 2648

<211> 161

<212> PRT

<213> Unknown (4877304-dir-0-6 conceptual translation of range 2-484)

<400>2648

```

Leu Ala Ile Cys Tyr Pro Leu His Tyr Ser Ala Leu Met Thr Asn Lys
 1              5              10              15

```

```

His Ala Ile Arg Leu Ser Cys Leu Cys Trp Ile Ile Gly Phe Leu Ile
      20                      25                      30
Leu Ile Met Asn Leu Cys Phe Ile Arg Gln Thr Leu Phe Cys Gly Pro
      35                      40                      45
Asn Glu Val Pro His Tyr Phe Cys Asp Tyr Ser Ala Val Ala Ala Leu
      50                      55                      60
Ala Cys Asn Asp Ile Ser Ile Tyr Ala Ala Val Gly Phe Ala Ile Ala
      65                      70                      75                      80
Met Cys Val Ile Cys Ser Val Leu Leu Cys Leu Val Tyr Ser Tyr Val
      85                      90
Lys Ile Val Ala Ser Val Leu Lys Ile Ala Ser Thr Asp Gly Arg Gln
      100                      105                      110
Lys Ala Phe Ser Thr Cys Val Ser His Leu Phe Val Val Ser Val Phe
      115                      120                      125
Ser Ile Leu Ala Ala Phe Val Phe Val Ser Tyr Arg Ile Glu Glu Phe
      130                      135                      140
Ser Glu Asp Ala Arg Met Ile Ile His Val Val Gln Asn Thr Phe Pro
      145                      150                      155                      160
Ser

```

<210> 2649

<211> 168

<212> PRT

<213> Unknown (5262456-dir-284-6 conceptual translation of range 28407-28908)

<220>

<221> VARIANT

<222> (1)...(168)

<223> Xaa = Any Amino Acid

<400>2649

```

Gly Phe Trp Leu Gly Cys Tyr Leu Trp Phe Met Val Val Leu Thr Leu
  1           5           10           15
Ala Ile Arg Leu Arg Pro Phe Gly Leu Gly Gly Phe Leu Leu Lys Xaa
      20           25           30
Thr Ile Glu Xaa Gly Ala Cys Pro Arg Xaa Val Met Leu Leu Leu Cys
      35           40           45
Gln Lys Pro Tyr Leu His Cys Val Val Val Val Val Phe Ile Phe Leu
      50           55           60
Ala Ser Leu Leu Leu Ile Leu Val Ser Tyr Gly Phe Ile Ala Val Ala
      65           70           75           80
Val Leu Lys Ile Lys Ser Ala Ala Gly Arg Gln Lys Ala Phe Gly Thr
      85           90           95
Cys Phe Ser His Leu Ile Val Val Ser Ile Phe Tyr Gly Thr Val Arg
      100          105          110
Tyr Met Tyr Ile Glu Pro Gly Asn Ser Pro Ser Gln Asp Glu Gly Lys
      115          120          125
Leu Leu His Ile Phe Tyr Ser Ile Val Thr Pro Thr Leu Asn Pro Tyr
      130          135          140
Pro Leu Arg Asn Lys Glu Phe Lys Trp Ala Met Lys Arg Leu Ile Gly
      145          150          155          160
Lys Glu Lys Gly Ser Gly Asp Thr
      165

```

<210> 2650

<211> 312

<212> PRT

<213> Unknown (3941546-dir-0-12 conceptual translation of range 37-972)

<400>2650

```

Asn Val Ser Phe Tyr Asn Phe Lys Cys Thr Leu Ser Glu Leu Thr Gln
 1          5          10          15
Pro Gln Arg Val Val Leu Ile Trp Val Phe Thr Ile Ile Ile Thr Ile
 20          25          30
Thr Val Val Gly Asn Ile Leu Thr Ile Val Ser Ile Leu Tyr Phe Arg
 35          40          45
Gln Leu Gln Thr Arg Thr Asn Val Leu Ala Leu Ser Leu Ala Leu Ala
 50          55          60
Asp Phe Leu Val Gly Cys Leu Ile Met Pro Phe Ser Val Met Arg Thr
 65          70          75          80
Ala Tyr Ser Cys Trp Phe Tyr Gly Gln Leu Met Cys Arg Ile His Thr
 85          90          95
Trp Leu Asp Tyr Thr Phe Thr Thr Cys Ser Ile Phe Asn Leu Ala Cys
 100         105         110
Ile Ser Ile Asp Arg Tyr Val Ala Ile Ser Asp Pro Leu Arg Tyr Asp
 115         120         125
Gln Arg Val Thr Tyr Arg Ile Leu Ala Val Met Leu Thr Ile Cys Trp
 130         135         140
Gly Asn Ile Ile Pro Tyr Gly Val Ser Tyr Met Leu Lys Leu Asn Ile
 145         150         155         160
Asn Gly Ile Glu Ser Val Val Ala Ala Lys Ser Cys Pro Asp Asn Cys
 165         170         175
Ser Val Phe Met Asn Val Pro Phe Gly Leu Ala Asn Ser Met Gly Ala
 180         185         190
Tyr Val Leu Pro Met Leu Phe Ile Met Ala Ala Tyr Ser Arg Ile Tyr
 195         200         205
Val Met Ala Arg Asn Gln Ala Lys Arg Ile Ser Ser Leu Gly Asp Gln
 210         215         220
Val Arg Ala Ser Asn Ala Ser Asp Leu Thr Met Gln Ser Lys Trp Asn
 225         230         235         240
Ala Met Lys Arg Asp His Asn Ala Thr Lys Thr Leu Gly Met Ile Met
 245         250         255
Val Val Leu Phe Ile Val Trp Leu Pro Phe Ile Val Val Val Ala Thr
 260         265         270
Glu Pro Val Ile Gly Tyr Arg Met Asp Ser Thr Val Trp Asp Val Ala
 275         280         285
Asn Trp Phe Thr Tyr Phe Asn Ser Arg Met Asn Pro Ile Leu Phe Ala
 290         295         300
Ser Phe Asn Asn Ser Phe Arg Ser
 305         310

```

<210> 2651

<211> 314

<212> PRT

<213> Unknown (17-2 (HGMP07I 400671 OL1A 438389 P30953 OLFI 1804351A S20572)
Parmentier-M 92)

<400>2651

```

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1          5          10          15
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
 20          25          30
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
 35          40          45
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
 65          70          75          80
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
 85          90          95
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser

```

| | | | | | | | | | | | | | | | |
|----------|-----|-----|-----|----------|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----------|-----|
| Met 1 | Asp | Gly | Gly | Asn 5 | Gln | Ser | Glu | Gly | Ser 10 | Glu | Phe | Leu | Leu | Leu 15 | Gly |
| Met | Ser | Glu | Ser | Pro | Glu | Gln | Gln | Gln | Ile | Leu | Phe | Trp | Met | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ser | Met | Tyr | Leu | Val | Thr | Val | Val | Gly | Asn | Val | Leu | Ile | Ile | Leu | Ala |
| | | | 35 | | | | | 40 | | | | 45 | | | |
| Ile | Ser | Ser | Asp | Ser | Arg | Leu | His | Thr | Pro | Val | Tyr | Phe | Phe | Leu | Ala |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Phe | Thr | Asp | Leu | Phe | Phe | Val | Thr | Asn | Thr | Ile | Pro | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Met | Leu | Val | Asn | Leu | Gln | Ser | His | Asn | Lys | Ala | Ile | Ser | Tyr | Ala | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Leu | Thr | Gln | Leu | Tyr | Phe | Leu | Val | Ser | Leu | Val | Ala | Leu | Asp | Asn |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Ile | Leu | Ala | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Cys |
| | | | 115 | | | | | 120 | | | | 125 | | | |
| Pro | Leu | His | Tyr | Thr | Thr | Ala | Met | Ser | Pro | Lys | Leu | Cys | Ile | Leu | Leu |
| | | | | | | 135 | | | | | 140 | | | | |
| Leu | Ser | Leu | Cys | Trp | Val | Leu | Ser | Val | Leu | Tyr | Gly | Leu | Ile | His | Thr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Leu | Met | Thr | Arg | Val | Thr | Phe | Cys | Gly | Ser | Arg | Lys | Ile | His | Tyr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ile | Phe | Cys | Glu | Met | Tyr | Val | Leu | Leu | Arg | Met | Ala | Cys | Ser | Asn | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Gln | Ile | Asn | His | Thr | Val | Leu | Ile | Ala | Thr | Gly | Cys | Phe | Ile | Phe | Leu |
| | | | 195 | | | | | 200 | | | | 205 | | | |
| Ile | Pro | Phe | Gly | Phe | Val | Ile | Ile | Ser | Tyr | Val | Leu | Ile | Ile | Arg | Ala |

210 215 220
 Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
 245 250 255
 Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
 260 265 270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
 275 280 285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
 290 295 300
 Asp Lys His Phe Lys Arg Leu Thr
 305 310

<210> 2653

<211> 315

<212> PRT

<213> Unknown (17-40 (OL1E 516320 2209308A 1588713))

<400>2653

Met Gln Pro Glu Ser Gly Ala Asn Gly Thr Val Ile Ala Glu Phe Ile
 1 5 10 15
 Leu Leu Gly Leu Leu Glu Ala Pro Gly Leu Gln Pro Val Val Phe Val
 20 25 30
 Leu Phe Leu Phe Ala Tyr Leu Val Thr Val Arg Gly Asn Leu Ser Ile
 35 40 45
 Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Ser Val Thr
 65 70 75 80
 Val Pro Ser Met Leu Ser Arg Leu Leu Ser Arg Lys Arg Ala Val Pro
 85 90 95
 Cys Gly Ala Cys Leu Thr Gln Leu Phe Phe His Leu Phe Val Gly
 100 105 110
 Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Gln Phe Leu Ala
 115 120 125
 Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
 130 135 140
 Arg Met Leu Val Ala Ala Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu
 145 150 155 160
 Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Val
 165 170 175
 Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
 180 185 190
 Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Ala Val Gly Phe Ile
 195 200 205
 Met Ala Gly Thr Pro Met Ala Leu Ile Val Ile Ser Tyr Ile His Val
 210 215 220
 Ala Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
 225 230 235 240
 Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly
 245 250 255
 Ser Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
 260 265 270
 Lys Asp Lys Ala Val Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
 275 280 285
 Asn Pro Ile Ile Tyr Ser Phe Arg Asn Pro Asp Val Gln Ser Ala Ile
 290 295 300
 Trp Arg Met Leu Thr Gly Arg Arg Ser Leu Ala
 305 310 315

<210> 2654
 <211> 323
 <212> PRT
 <213> Unknown (17-93)

<400>2654

```

Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Leu Gly
 1          5          10          15
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
          20          25          30
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
          35          40          45
Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
          50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
65          70          75          80
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
          85          90          95
Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
          100          105          110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
          115          120          125
Pro Met His Tyr Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile
          130          135          140
Met Ser Pro Met Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu
145          150          155          160
Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys
          165          170          175
Phe Cys Ala Asp Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala
          180          185          190
Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile
          195          200          205
Phe Ile Met Gly Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu
          210          215          220
Gly Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser
225          230          235          240
Lys Gly Ile Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
          245          250          255
Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser
          260          265          270
Ala Asn Ser Ser Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr
          275          280          285
Val Val Thr Pro Met Leu Thr Pro Phe Ile Tyr Ser Leu Arg Asn Arg
          290          295          300
Asp Met Lys Gly Ala Leu Glu Arg Val Ile Cys Lys Arg Lys Asn Pro
305          310          315          320
Phe Leu Leu

```

<210> 2655
 <211> 316
 <212> PRT
 <213> Unknown (FAT11 (HUMORLMHC A57069 601919 1097174 1362875) Fan-W 95)

<400>2655

```

Met Asp Asn Gln Ser Ser Thr Pro Gly Phe Leu Leu Leu Gly Phe Ser
 1          5          10          15
Glu His Pro Gly Leu Gly Arg Thr Leu Phe Val Asp Val Ile Thr Ser
          20          25          30
Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile Leu Leu Ser Ala
          35          40          45

```

Leu Asp Thr Lys Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
 50 55 60
 Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val Pro Gln Met Leu
 65 70 75 80
 Ala Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe Leu Asp Cys Ser
 85 90 95
 Val Gln Ile Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
 100 105 110
 Met Lys Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
 115 120 125
 His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp Gln Leu Ala Ser
 130 135 140
 Val Ala Trp Val Ile Gly Leu Val Gly Ser Val Val Gln Thr Pro Ser
 145 150 155 160
 Thr Leu His Leu Pro Phe Cys Pro Asp Arg Gln Val Asp Asp Phe Val
 165 170 175
 Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Glu Asp Thr Ser Tyr
 180 185 190
 Asn Glu Ile Gln Val Ala Val Ala Ser Val Phe Ile Leu Val Val Pro
 195 200 205
 Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Thr Trp Ala Val Leu
 210 215 220
 Arg Ile Asn Ser Ala Thr Ala Trp Arg Lys Ala Phe Gly Thr Cys Ser
 225 230 235 240
 Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
 245 250 255
 Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Gly Arg Gly Lys Phe Phe
 260 265 270
 Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Val Tyr
 275 280 285
 Thr Leu Arg Asn Lys Glu Ile Lys Arg Ala Leu Arg Arg Leu Leu Gly
 290 295 300
 Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala
 305 310 315

<210> 2656

<211> 254

<212> PRT

<213> Unknown (H8 (432510) Selbie-LA 92)

<400>2656

Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Leu Asp Ile Gly Phe
 1 5 10 15
 Ile Ser Thr Ile Ile Pro Lys Met Leu Asp His Ile Ser Ser Gly Ile
 20 25 30
 Lys Leu Ile Ser Tyr Gly Glu Cys Leu Thr Gln Leu Tyr Phe Ser Gly
 35 40 45
 Leu Phe Ala Asp Leu Asp Asn Asn Phe Leu Leu Ala Val Met Ala Ile
 50 55 60
 Asp Arg Tyr Val Ala Ile Ser His Pro Leu His Tyr Ala Leu Thr Met
 65 70 75 80
 Asn Ser Gln Arg Cys Val Leu Leu Val Ala Val Ser Trp Val Ile Thr
 85 90 95
 Ile Leu His Ala Leu Val His Thr Leu Leu Val Thr Arg Leu Ser Phe
 100 105 110
 Cys Gly Pro Asn Ile Ile Pro His Phe Phe Cys Asp Leu Val Pro Leu
 115 120 125
 Leu Lys Leu Ala Cys Ser Ser Thr Cys Val Asn Asp Leu Val Leu Ile
 130 135 140
 Leu Val Pro Gly Thr Leu Leu Ile Ala Pro Phe Val Cys Ile Leu Met
 145 150 155 160

Ser Tyr Phe Tyr Ile Ala Leu Ala Ile Leu Arg Ile Asp Ser Pro Arg
 165 170 175
 Gly Lys Gln Arg Ala Phe Ser Ser Cys Thr Ser His Leu Ser Val Val
 180 185 190
 Ser Leu Phe Tyr Ser Thr Ala Ile Gly Val Tyr Leu Cys Pro Pro Ser
 195 200 205
 Ser His Ser Asp Gly Lys Asp Arg Val Phe Ser Val Met Tyr Thr Val
 210 215 220
 Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp
 225 230 235 240
 Met Lys Gly Ala Leu Gly Lys Leu Leu Gly Ile Lys Thr Ser
 245 250

<210> 2657

<211> 195

<212> PRT

<213> Unknown (G3 (432509) Selbie-LA 92)

<400>2657

Glu Phe Leu Leu Leu Gly Leu Ser Glu Asp Pro Asp Leu Gln Pro Val
 1 5 10 15
 Leu Ala Leu Leu Ser Leu Ser Leu Ser Met Tyr Leu Val Met Val Leu
 20 25 30
 Arg Asn Leu Leu Ser Ile Leu Ala Val Ser Ser Asp Ser Pro Leu His
 35 40 45
 Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Cys Trp Pro Asp Ile Gly
 50 55 60
 Phe Thr Ser Ala Met Val Pro Lys Met Ile Val Asp Thr Gln Ser His
 65 70 75 80
 Ser Arg Val Ile Ser His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu
 85 90 95
 Leu Leu Val Ala Cys Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr
 100 105 110
 Asp Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Ile Ile Val
 115 120 125
 Asn Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser
 130 135 140
 Leu Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Gln Leu Thr Ile
 145 150 155 160
 Ile Lys Asn Val Glu Ile Ser Asn Leu Val Cys Asp Pro Ser Gln Leu
 165 170 175
 Leu Lys Leu Ala Cys Ser Asp Ser Val Leu Thr Asn Ile Phe Ile Tyr
 180 185 190
 Ser Ile Gly
 195

<210> 2658

<211> 314

<212> PRT

<213> Unknown (HsOLF1 (1336041 HSU56420) Issel-Tarver-L 97 11q11)

<400>2658

Met Glu Phe Thr Asp Arg Asn Tyr Thr Leu Val Thr Glu Phe Ile Leu
 1 5 10 15
 Leu Gly Phe Pro Thr Arg Pro Glu Leu Gln Ile Val Leu Phe Leu Met
 20 25 30
 Phe Leu Thr Leu Tyr Ala Ile Ile Leu Ile Gly Asn Ile Gly Leu Met
 35 40 45
 Leu Leu Ile Arg Ile Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe
 50 55 60
 Leu Ser Asn Leu Ser Phe Val Asp Leu Cys Tyr Phe Ser Asp Ile Val

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| 65 | | | | | 70 | | | | | 75 | | | | 80 |
| Pro | Lys | Met | Leu | Val | Asn | Phe | Leu | Ser | Glu | Asn | Lys | Ser | Ile | Ser Tyr |
| | | | | 85 | | | | | 90 | | | | 95 | |
| Tyr | Gly | Cys | Ala | Leu | Gln | Phe | Tyr | Phe | Phe | Cys | Thr | Phe | Ala | Asp Thr |
| | | | 100 | | | | | 105 | | | | | 110 | |
| Glu | Ser | Phe | Ile | Leu | Ala | Ala | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala Ile |
| | | 115 | | | | | 120 | | | | 125 | | | |
| Cys | Asn | Pro | Leu | Leu | Tyr | Thr | Val | Val | Met | Ser | Arg | Gly | Ile | Cys Met |
| | | 130 | | | | 135 | | | | | 140 | | | |
| Arg | Leu | Ile | Val | Leu | Ser | Tyr | Leu | Gly | Gly | Asn | Met | Ser | Ser | Leu Val |
| 145 | | | | | 150 | | | | | 155 | | | | 160 |
| His | Thr | Ser | Phe | Ala | Phe | Ile | Leu | Lys | Tyr | Cys | Asp | Lys | Asn | Val Ile |
| | | | 165 | | | | | | 170 | | | | | 175 |
| Asn | His | Phe | Phe | Cys | Asp | Leu | Pro | Pro | Leu | Leu | Lys | Leu | Ser | Cys Thr |
| | | 180 | | | | | 185 | | | | | | 190 | |
| Asp | Thr | Thr | Ile | Asn | Glu | Trp | Leu | Leu | Ser | Thr | Tyr | Gly | Ser | Ser Val |
| | | 195 | | | | 200 | | | | | | 205 | | |
| Glu | Ile | Ile | Cys | Phe | Ile | Ile | Ile | Ile | Ser | Tyr | Phe | Phe | Ile | Leu |
| | 210 | | | | 215 | | | | | 220 | | | | |
| Leu | Ser | Val | Leu | Lys | Ile | Arg | Ser | Phe | Ser | Gly | Arg | Lys | Lys | Thr Phe |
| 225 | | | | | 230 | | | | | 235 | | | | 240 |
| Ser | Thr | Cys | Ala | Ser | His | Leu | Thr | Ser | Val | Thr | Ile | Tyr | Gln | Gly Thr |
| | | | 245 | | | | | | 250 | | | | | 255 |
| Leu | Leu | Phe | Ile | Tyr | Ser | Arg | Pro | Ser | Tyr | Leu | Tyr | Ser | Pro | Asn Thr |
| | | 260 | | | | | 265 | | | | | | 270 | |
| Asp | Lys | Ile | Ile | Ser | Val | Phe | Tyr | Thr | Ile | Phe | Ile | Pro | Val | Leu Asn |
| | | 275 | | | | | 280 | | | | | 285 | | |
| Pro | Leu | Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Val | Lys | Asp | Ala | Ala Glu |
| | 290 | | | | | 295 | | | | 300 | | | | |
| Lys | Val | Leu | Arg | Ser | Lys | Val | Asp | Ser | Ser | | | | | |
| 305 | | | | | 310 | | | | | | | | | |

<210> 2659

<211> 317

<212> PRT

<213> Unknown (HsOLF3 (1336043 HSU56421) Issel-Tarver-L 97 7q35)

<400>2659

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| Met | Gly | Thr | Asp | Asn | Gln | Thr | Trp | Val | Ser | Glu | Phe | Ile | Leu | Leu Gly |
| 1 | | | | 5 | | | | | 10 | | | | 15 | |
| Leu | Ser | Ser | Asp | Trp | Asp | Thr | Arg | Val | Ser | Leu | Phe | Val | Leu | Phe Leu |
| | | | 20 | | | | 25 | | | | | 30 | | |
| Val | Met | Tyr | Val | Val | Thr | Val | Leu | Gly | Asn | Cys | Leu | Ile | Val | Leu Leu |
| | | 35 | | | | 40 | | | | | 45 | | | |
| Ile | Arg | Leu | Asp | Ser | Arg | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu Thr |
| | 50 | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Leu | Val | Asp | Val | Ser | Tyr | Ala | Thr | Ser | Val | Val | Pro Gln |
| 65 | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Leu | Ala | His | Phe | Leu | Ala | Glu | His | Lys | Ala | Ile | Pro | Phe | Gln Ser |
| | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Ala | Ala | Gln | Leu | Phe | Phe | Ser | Leu | Ala | Leu | Gly | Gly | Ile | Glu Phe |
| | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Leu | Leu | Ala | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Val | Cys Asp |
| | | 115 | | | | 120 | | | | | 125 | | | |
| Ala | Leu | Arg | Tyr | Ser | Ala | Ile | Met | His | Gly | Gly | Leu | Cys | Ala | Arg Leu |
| | 130 | | | | 135 | | | | | 140 | | | | |
| Ala | Ile | Thr | Ser | Trp | Val | Ser | Gly | Phe | Ile | Ser | Ser | Pro | Val | Gln Thr |
| 145 | | | | 150 | | | | | 155 | | | | | 160 |
| Ala | Ile | Thr | Phe | Gln | Leu | Pro | Met | Cys | Arg | Asn | Lys | Phe | Ile | Asp His |
| | | | 165 | | | | 170 | | | | | | 175 | |
| Ile | Ser | Cys | Glu | Leu | Leu | Ala | Val | Val | Arg | Leu | Ala | Cys | Val | Asp Thr |

290 295 300
 Ile Gly Arg Val Val Phe Ser Val
 305 310

<210> 2661

<211> 315

<212> PRT

<213> Unknown (OLFMF2 gi|2808536|emb|AJ003145|HSAJ03145 Homo sapiens mRNA for)

<400>2661

Val Gln Thr Tyr Glu Arg Asp Lys Pro Val Ser Val Ser Glu Phe Leu
 1 5 10 15
 Leu Leu Gly Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val
 20 25 30
 Phe Phe Leu Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile
 35 40 45
 Ile Leu Ala Ile Ser Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe
 50 55 60
 Phe Leu Ser Asn Met Ser Phe Val Asp Asn Cys Phe Ser Thr Thr Val
 65 70 75 80
 Pro Lys Met Leu Ala Asn His Ile Leu Arg Thr Gln Thr Ile Ser Phe
 85 90 95
 Ser Gly Cys Leu Met Gln Met Tyr Phe Ile Ser Glu Leu Ala Asp Met
 100 105 110
 Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
 115 120 125
 Cys Arg Pro Leu His Tyr Thr Ala Lys Met Ile His Gln Leu Cys Ala
 130 135 140
 Leu Leu Val Thr Gly Ser Trp Val Val Ala Asn Ser Asn Ala Leu Leu
 145 150 155 160
 His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile
 165 170 175
 Pro His Ile Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser
 180 185 190
 Asp Thr His Leu Ser Glu Val Met Ile Leu Thr Glu Ala Ala Leu Val
 195 200 205
 Thr Ile Thr Pro Phe Leu Cys Leu Leu Ala Ser Tyr Met His Ile Thr
 210 215 220
 Cys Val Val Leu Arg Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe
 225 230 235 240
 Ser Thr Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Gly Thr
 245 250 255
 Ile Met Ser Pro Tyr Phe Arg Thr Ser Ser Ser His Ser Ala Gln Arg
 260 265 270
 Asp Ile Ala Ala Ala Val Arg Phe Thr Val Val Thr Pro Val Met Asn
 275 280 285
 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Val
 290 295 300
 Lys Val Val Ala Val Lys Phe Phe Ser Val Gln
 305 310 315

<210> 2662

<211> 313

<212> PRT

<213> Unknown (CFDTMT)

<400>2662

Met Thr Glu Lys Asn Gln Thr Val Val Ser Glu Phe Val Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Asp Pro Asp Gln Arg Asp Leu Phe Tyr Ala Leu Phe Leu

| | | | | | | | | | | | | | | | |
|----------|-----|-----|-----|----------|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----------|-----|
| Met 1 | Glu | Leu | Glu | Asn 5 | Asp | Thr | Arg | Ile | Pro 10 | Glu | Phe | Leu | Leu | Leu 15 | Gly |
| Phe | Ser | Glu | Glu | Pro | Lys | Leu | Gln | Pro | Phe | Leu | Phe | Gly | Leu | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ser | Met | Tyr | Leu | Val | Thr | Ile | Leu | Gly | Asn | Leu | Leu | Leu | Ile | Leu | Ala |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Val | Ser | Ser | Asp | Ser | His | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ala |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ser | Phe | Val | Asp | Ile | Cys | Phe | Thr | Cys | Thr | Thr | Ile | Pro | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Met | Leu | Val | Asn | Ile | Gln | Thr | Gln | Arg | Lys | Val | Ile | Thr | Tyr | Glu | Ser |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Cys | Ile | Ile | Gln | Met | Tyr | Phe | Phe | Glu | Leu | Phe | Ala | Gly | Ile | Asp | Asn |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Leu | Leu | Thr | Val | Met | Ala | Tyr | Asp | Arg | Tyr | Met | Ala | Ile | Cys | Tyr |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Leu | His | Tyr | Met | Val | Ile | Met | Asn | Pro | Gln | Leu | Cys | Ser | Leu | Leu |


```

      130              135              140
Leu Leu Val Ser Trp Ile Met Ser Ala Leu His Ser Leu Leu Gln Thr
145              150              155              160
Leu Met Val Leu Arg Leu Ser Phe Cys Thr His Phe Gln Ile Pro His
      165              170              175
Phe Phe Cys Glu Leu Asn Gln Met Ile Gln Leu Ala Cys Ser Asp Thr
      180              185              190
Phe Leu Asn Asn Met Met Leu Tyr Phe Ala Ala Ile Leu Leu Gly Val
      195              200              205
Ala Pro Leu Val Gly Val Leu Tyr Ser Tyr Phe Lys Ile Val Ser Ser
      210              215              220
Ile Arg Gly Ile Ser Ser Ala His Ser Lys Tyr Lys Ala Phe Ser Thr
225              230              235              240
Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Ser Leu
      245              250              255
Gly Val Tyr Leu Ser Ser Ala Ala Pro Gln Ser Thr His Thr Ser Ser
      260              265              270
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
      275              280              285
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Asn Val Phe
      290              295              300
Phe Arg Gly Lys Pro
305

```

<210> 2664

<211> 317

<212> PRT

<213> Unknown (CfOLF3 (CFU53681) Issel-Tarver-L 97)

<400>2664

```

Met Gly Thr Gly Asn Gln Thr Trp Val Arg Glu Phe Val Leu Leu Gly
1      5      10      15
Leu Ser Ser Asp Trp Asp Thr Glu Val Ser Leu Phe Val Leu Phe Leu
      20      25      30
Ile Thr Tyr Met Val Thr Val Leu Gly Asn Phe Leu Ile Ile Leu Leu
      35      40      45
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
      50      55      60
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Ile Ile Pro Gln
65      70      75      80
Met Leu Ala His Leu Ala Ala His Lys Ala Ile Pro Phe Val Ser
      85      90      95
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
      100      105      110
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
      115      120      125
Pro Leu Arg Tyr Ser Val Ile Met His Gly Gly Leu Cys Thr Arg Leu
130      135      140
Ala Ile Thr Ser Trp Val Ser Gly Ser Met Asn Ser Leu Met Gln Thr
145      150      155      160
Val Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
      165      170      175
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
      180      185      190
Ser Ser Asn Glu Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
      195      200      205
Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
210      215      220
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Lys Lys Ala Phe His Thr
225      230      235      240
Cys Ala Ser His Leu Thr Val Val Val Leu Cys Tyr Gly Met Ala Ile

```

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| | | | | 245 | | | | | 250 | | | | | 255 | | | | | |
| Phe | Thr | Tyr | Ile | Gln | Pro | Arg | Ser | Ser | Pro | Ser | Val | Leu | Gln | Glu | Lys | | | | |
| | | | 260 | | | | | 265 | | | | | 270 | | | | | | |
| Leu | Ile | Ser | Leu | Phe | Tyr | Ser | Val | Leu | Thr | Pro | Met | Leu | Asn | Pro | Met | | | | |
| | | 275 | | | | | 280 | | | | | 285 | | | | | | | |
| Ile | Tyr | Ser | Val | Arg | Asn | Lys | Glu | Val | Lys | Gly | Ala | Trp | Gln | Lys | Leu | | | | |
| | 290 | | | | | 295 | | | | | 300 | | | | | | | | |
| Leu | Gly | Gln | Leu | Thr | Gly | Ile | Thr | Ser | Lys | Leu | Ala | Thr | | | | | | | |
| 305 | | | | | 310 | | | | | 315 | | | | | | | | | |

<210> 2665

<211> 311

<212> PRT

<213> Unknown (CfOLF2 (1314663 CFU53680) Issel-Tarver-L 97)

<400>2665

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Met | Asp | Gly | Lys | Asn | Cys | Ser | Ser | Val | Asn | Glu | Phe | Leu | Leu | Val | Gly | | | | |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | | | | | |
| Ile | Ser | Asn | Lys | Pro | Gly | Val | Lys | Val | Thr | Leu | Phe | Ile | Thr | Phe | Leu | | | | |
| | | 20 | | | | | 25 | | | | | | 30 | | | | | | |
| Ile | Val | Tyr | Leu | Ile | Ile | Leu | Val | Ala | Asn | Leu | Gly | Met | Ile | Ile | Leu | | | | |
| | 35 | | | | | 40 | | | | | | 45 | | | | | | | |
| Ile | Arg | Met | Asp | Ser | Gln | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ser | | | | |
| | 50 | | | | | 55 | | | | | 60 | | | | | | | | |
| His | Leu | Ser | Phe | Ser | Asp | Ala | Arg | Tyr | Ser | Thr | Ala | Val | Gly | Pro | Arg | | | | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | | | | |
| Met | Leu | Val | Gly | Phe | Ile | Ala | Lys | Asn | Lys | Ser | Ile | Pro | Phe | Tyr | Ser | | | | |
| | | | 85 | | | | | 90 | | | | | | 95 | | | | | |
| Cys | Ala | Met | Gln | Trp | Leu | Val | Phe | Cys | Thr | Phe | Val | Asp | Ser | Glu | Cys | | | | |
| | | 100 | | | | | | 105 | | | | | 110 | | | | | | |
| Leu | Leu | Leu | Ala | Val | Met | Ala | Phe | Asp | Arg | Tyr | Lys | Ala | Ile | Ser | His | | | | |
| | | 115 | | | | | 120 | | | | | | 125 | | | | | | |
| Pro | Leu | Leu | Tyr | Thr | Val | Ser | Met | Ser | Ser | Arg | Val | Cys | Ser | Leu | Leu | | | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | | | |
| Met | Ala | Gly | Val | Tyr | Leu | Val | Gly | Ile | Met | Asp | Ala | Ser | Val | Asn | Thr | | | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | | | |
| Ile | Leu | Thr | Phe | Arg | Leu | Cys | Phe | Cys | Glu | Ser | Asn | Val | Ile | Asn | His | | | | |
| | | | 165 | | | | | | 170 | | | | | 175 | | | | | |
| Phe | Phe | Cys | Asp | Val | Pro | Pro | Leu | Leu | Leu | Leu | Ser | Cys | Ser | Asp | Thr | | | | |
| | | 180 | | | | | 185 | | | | | | 190 | | | | | | |
| Gln | Val | Asn | Glu | Leu | Val | Ile | Phe | Thr | Ile | Phe | Gly | Phe | Ile | Glu | Leu | | | | |
| | 195 | | | | | | 200 | | | | | 205 | | | | | | | |
| Ile | Thr | Leu | Ser | Gly | Leu | Phe | Val | Ser | Tyr | Cys | Tyr | Ile | Ile | Leu | Ala | | | | |
| | 210 | | | | | 215 | | | | | 220 | | | | | | | | |
| Val | Arg | Lys | Ile | Asn | Ser | Ala | Glu | Gly | Arg | Phe | Lys | Ala | Phe | Ser | Thr | | | | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | | | | |
| Cys | Thr | Ser | His | Leu | Thr | Ala | Val | Ala | Ile | Phe | Gln | Gly | Thr | Met | Leu | | | | |
| | | | 245 | | | | | | 250 | | | | | 255 | | | | | |
| Phe | Met | Tyr | Phe | Arg | Pro | Ser | Ser | Ser | Tyr | Ser | Leu | Asp | Gln | Asp | Lys | | | | |
| | | 260 | | | | | | 265 | | | | | 270 | | | | | | |
| Ile | Ile | Ser | Leu | Phe | Tyr | Ser | Leu | Val | Ile | Pro | Met | Leu | Asn | Pro | Leu | | | | |
| | | 275 | | | | | 280 | | | | | 285 | | | | | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Val | Lys | Glu | Ala | Leu | Lys | Lys | Leu | | | | |
| | 290 | | | | | 295 | | | | | 300 | | | | | | | | |
| Lys | Asn | Lys | Lys | Trp | Phe | His | | | | | | | | | | | | | |
| 305 | | | | | 310 | | | | | | | | | | | | | | |

<210> 2666

<211> 311

<212> PRT

<213> Unknown (CfOLF1 (1314661 CFU53679) Issel-Tarver-L 97)

<400>2666

```

Met Asp Gly Asn Tyr Thr Leu Val Thr Glu Phe Ile Leu Leu Gly Phe
 1          5          10          15
Pro Thr Arg Pro Glu Leu Gln Ile Val Leu Phe Leu Val Phe Leu Thr
          20          25          30
Leu Tyr Gly Ile Ile Leu Thr Gly Asn Ile Gly Leu Met Met Leu Ile
          35          40          45
Arg Thr Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn
          50          55          60
Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Ala Ile Val Pro Lys Met
          65          70          75          80
Leu Val Asn Phe Leu Ser Glu Asn Lys Ser Ile Ser Leu Tyr Gly Cys
          85          90          95
Ala Leu Gln Phe Tyr Phe Ser Cys Ala Phe Ala Asp Thr Glu Ser Phe
          100          105          110
Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
          115          120          125
Leu Leu Tyr Thr Val Val Met Ser Arg Gly Ile Cys Val Trp Leu Ile
          130          135          140
Val Leu Ser Tyr Ile Gly Gly Asn Met Ser Ser Leu Val His Thr Ser
          145          150          155          160
Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn Val Ile Asn His Phe
          165          170          175
Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Thr Asp Thr Ser
          180          185          190
Val Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser Ser Val Glu Ile Phe
          195          200          205
Cys Phe Ile Val Ile Val Ile Ser Tyr Tyr Phe Ile Leu Arg Ser Val
          210          215          220
Leu Arg Ile Arg Ser Ser Ser Gly Arg Lys Lys Thr Phe Ser Thr Cys
          225          230          235          240
Ala Ser His Leu Thr Ser Val Ala Ile Tyr Gln Gly Thr Leu Leu Phe
          245          250          255
Ile Tyr Ser Arg Pro Thr Tyr Leu Tyr Thr Pro Asn Thr Asp Lys Ile
          260          265          270
Ile Ser Val Phe Tyr Thr Ile Ile Ile Pro Val Leu Asn Pro Leu Ile
          275          280          285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Ala Lys Arg Ala Val
          290          295          300
Arg Leu Lys Val Asp Ser Ser
          305          310

```

<210> 2667

<211> 155

<212> PRT

<213> Unknown (DRU42392)

<400>2667

```

Asn Pro Leu Arg Tyr Pro Ala Val Met Thr Ser Asn Met Val Val His
 1          5          10          15
Leu Ser Ala Ala Ala Trp Gly Val Ala Val Val Leu Val Gly Ile Leu
          20          25          30
Ile Gly Leu Thr Val Arg Leu Ser Phe Cys Arg Ser Val Ile Glu Asn
          35          40          45
Pro Phe Cys Asp Asn Ala Ser Leu Phe Lys Leu Ser Cys Glu Ser Thr
          50          55          60
Ala Ile Asn Asn Ile Tyr Gly Leu Ser Phe Thr Val Val Leu Leu Thr
          65          70          75          80
Ser Ser Leu Gly Ser Ile Ala Leu Thr Tyr Leu Arg Ile Ala Ile Val
          85          90          95

```

Cys Phe Lys Ser Lys Asn Lys Ala Thr Asn Ser Lys Ala Ile Lys Thr
 100 105 110
 Cys Ser Thr His Leu Ala Val Tyr Leu Ile Met Met Val Ser Gly Leu
 115 120 125
 Thr Thr Ile Thr Leu His Arg Phe Pro Glu Leu Ser Asp Ser Arg Lys
 130 135 140
 Leu Ser Ser Ile Ile Lys His Ile Val Pro Pro
 145 150 155

<210> 2668

<211> 155

<212> PRT

<213> Unknown (DRU42394)

<400>2668

Asn Pro Leu Arg Tyr Gln Thr Ile Met Thr Asn Lys Thr Val Ile Thr
 1 5 10 15
 Leu Ser Ala Leu Ala Trp Gly Ile Ala Leu Leu Phe Ile Ser Ile Leu
 20 25 30
 Ile Gly Leu Thr Leu Arg Leu Ser Arg Cys Arg Thr Phe Ile Ser Asn
 35 40 45
 Pro Phe Cys Asp Asn Ala Ser Leu Phe Lys Leu Ser Cys Glu Asp Val
 50 55 60
 Thr Ile Asn Asn Leu Tyr Gly Leu Ile Tyr Thr Val Leu Leu Phe Gly
 65 70 75 80
 Ser Ser Met Gly Ser Ile Ala Val Thr Tyr Ile Lys Ile Thr Ala Val
 85 90 95
 Cys Leu Val Thr Lys Ser Lys Met Leu Asn Ser Arg Ala Leu Lys Thr
 100 105 110
 Cys Ser Thr His Leu Ser Leu Tyr Leu Ile Met Leu Ile Ser Gly Leu
 115 120 125
 Ile Ile Ile Val Leu His Arg Phe Pro Ala Tyr Ser Asp Tyr Arg Lys
 130 135 140
 Ile Ala Ser Leu Leu Phe His Ile Ile Pro Ser
 145 150 155

<210> 2669

<211> 157

<212> PRT

<213> Unknown (DRU42395)

<400>2669

Leu Pro Leu Arg Tyr His Ala Ile Val Asn Asn Ser Ser Ile Thr Leu
 1 5 10 15
 Ile Leu Ser Ala Lys Trp Ala Phe Asn Ser Ser Ile Val Ala Leu Met
 20 25 30
 Val Ser Leu Ile Thr Arg Ile Ser Phe Cys Asp Ser Asn Val Ile Gln
 35 40 45
 Ser Tyr Phe Cys Asp His Gly Pro Val Tyr Arg Leu Ala Cys Asn Asp
 50 55 60
 Asn Ser Ile Asn Arg Phe Met Gly Ser Phe Ile Thr Cys Leu Tyr Leu
 65 70 75 80
 Val Val Pro Leu Gly Ile Ile Ile Leu Ser Tyr Ile Gly Ile Phe Leu
 85 90 95
 Ala Leu Asn Lys Ile Thr Thr Trp Glu Ser Arg Leu Lys Ala Leu Lys
 100 105 110
 Thr Cys Val Ser His Leu Leu Leu Val Gly Ile Tyr Phe Leu Pro Met
 115 120 125
 Ser Cys Thr Tyr Ile Ala Ala Trp Leu Leu Ala Leu Ala Pro Asn Ala
 130 135 140
 Arg Val Ile Thr Thr Ser Leu Ala Tyr Thr Ile Ser Gln

145

150

155

<210> 2670

<211> 150

<212> PRT

<213> Unknown (DRU42396)

<400>2670

```

Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Val Ile Val Asn Asn
 1           5           10           15
Thr Ser Met Ile Ser Ile Phe Ser Ala Val Phe Met Phe Asn Ser Ile
      20           25           30
Ile Val Ala Ser Met Val Ser Leu Val Thr Asn Ile Ser Phe Cys Lys
      35           40           45
Ser Asn Val Ile Gln Ser Tyr Phe Cys Asp His Gly Pro Met Phe Arg
      50           55           60
Met Ala Cys Asn Asp Asn Asn Ile Asn Lys Ile Met Gly Phe Leu Tyr
65           70           75           80
Thr Thr Leu Tyr Leu Ile Ala Pro Met Leu Val Ile Phe Leu Ser Tyr
      85           90           95
Leu Gly Ile Phe Leu Val Val Ser Lys Ile Ala Thr Trp Glu Arg Arg
      100           105           110
Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu Leu Leu Val Gly Ile
      115           120           125
Tyr Phe Leu Pro Ile Phe Phe Thr Tyr Leu Thr Ser Leu Leu Leu Phe
      130           135           140
Ser Thr Ser Asn Ser Arg
145           150

```

<210> 2671

<211> 158

<212> PRT

<213> Unknown (DRU42397 (odorant receptor 8; 1644478) Weth-F 96)

<400>2671

```

Asn Pro Leu Arg Tyr Pro Asn Ile Val Thr Lys Trp Asn Ile Phe Tyr
 1           5           10           15
Leu Cys Leu Ile Ser Trp Val Ile Ala Asn Val Thr Pro Leu Met Met
      20           25           30
Val Ile Arg Ala Tyr Pro Leu Pro Tyr Cys Ala Glu Asn Thr Ile Ile
      35           40           45
Gln Cys Tyr Cys Asp His Ile Ser Ile Thr Ser Leu Ala Cys Thr Asn
      50           55           60
Arg Ala Pro Tyr Ser Ile Pro Ala Phe Val Leu Ala Met Val Ala Leu
65           70           75           80
Leu Thr Pro Leu Ala Phe Ile Val Phe Ser Tyr Cys Ala Ile Ile Leu
      85           90           95
Ala Val Leu Arg Ile Ser Ser Thr Gln Ala Arg Leu Lys Thr Phe Ser
      100           105           110
Thr Cys Ser Pro Gln Leu Ile Ile Ile Ala Leu Tyr Phe Leu Pro Arg
      115           120           125
Cys Phe Ile Tyr Leu Ser Ser Asn Ile Gly Ile Tyr Phe Ser Thr Asp
      130           135           140
Leu Arg Leu Ala Ile Ile Met Met Tyr Ser Leu Phe Pro Pro
145           150           155

```

<210> 2672

<211> 155

<212> PRT

<213> Unknown (DRU42398 (1151131))

<400>2672

```

Arg Pro Leu Glu Tyr His Ser Ile Met Thr Asp Gln Arg Ile Ile Glu
 1           5           10           15
Cys Ile Leu Phe Cys Trp Leu Thr Pro Phe Phe Cys Met Ala Val Leu
      20           25           30
Ile Gly Leu Thr Ala Arg Leu Thr Leu Cys Gly Ser Ala Ile Glu Lys
      35           40           45
Leu Tyr Cys Glu Asn Trp Ser Val Val Lys Leu Ser Cys Phe Ser Thr
      50           55           60
Thr Val Asn Asn Val Val Gly Tyr Val Ile Ile Ile Val Tyr Phe Gly
65           70           75           80
His Ala Val Leu Ile Phe Cys Ser Tyr Ile Tyr Leu Val Val Lys Cys
      85           90           95
Arg Lys Ser Thr Glu Ser Arg His Lys Phe Ile Gln Thr Cys Val Pro
      100           105           110
His Leu Leu Ala Leu Leu Asn Val Thr Val Ala Leu Leu Phe Asp Val
      115           120           125
Leu Tyr Ser Arg Tyr Gly Ser Lys Ser Leu Pro Gln Asp Leu Arg Asn
      130           135           140
Phe Met Ser Leu Glu Phe Leu Leu Val Pro Pro
145           150           155

```

<210> 2673

<211> 174

<212> PRT

<213> Unknown (DRU44439)

<400>2673

```

Met Ala Tyr Asp Arg Leu Ile Ala Ile Cys Trp Pro Leu Arg Tyr Ser
 1           5           10           15
Thr Ile Asn Thr Asn Leu Arg Met Leu Leu Ile Ile Ala Leu Ile Trp
      20           25           30
Ile Leu Val Thr Leu Leu Asp Ile Phe Pro Val Ile Phe Ala Ser Arg
      35           40           45
Leu Pro Tyr Cys Ser Ser Arg Ala Val Leu Ser Cys Cys Cys Glu His
      50           55           60
Gly Pro Val Tyr Arg Leu Ala Cys Thr Asp Thr Tyr Asn Arg Gln
65           70           75           80
Leu Gly Thr Val Lys Thr Met Ile Thr Leu Leu Gly Pro Leu Phe Phe
      85           90           95
Ile Val Phe Thr Tyr Val Ile Val Val Ile Ala Val Met Arg Ile Ala
      100           105           110
Ser Val Thr Gln Arg Trp Lys Ala Phe His Thr Cys Leu Thr His Met
      115           120           125
Met Leu Val Met Leu Tyr Tyr Met Pro Ile Ile Ile Ala Cys Val Leu
      130           135           140
Gly Asn Leu Arg Leu Val Gln Asn Val Asp Leu Leu Thr Ala Ile Leu
145           150           155           160
Thr Arg Ser Val Thr Val Pro Ala Met Leu Asn Pro Ile Ile
      165           170

```

<210> 2674

<211> 173

<212> PRT

<213> Unknown (DRU44440)

<400>2674

```

Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His
 1           5           10           15
Ser Ile Val Asn Asn Ser Asn Met Ile Leu Ile Phe Ser Ala Ile Trp
      20           25           30

```

Ala Phe Asn Ser Ser Val Val Ala Leu Met Val Ser Leu Ile Asp Arg
 35 40 45
 Leu Ser Phe Cys Glu Ser Asn Met Ile Gln Ser Tyr Phe Cys Asp His
 50 55 60
 Gly Pro Val Tyr Arg Leu Ala Cys Ser Asp Ile Ser Lys Asn Lys Ile
 65 70 75 80
 Met Ala Tyr Val Ile Ser Ala Met Tyr Ile Ala Pro Met Val Val
 85 90 95
 Ile Val Phe Ser Tyr Leu Gly Ile Phe Leu Ala Leu Ile Lys Ile Thr
 100 105 110
 Thr Trp Glu Gly Arg Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu
 115 120 125
 Leu Leu Val Gly Ile Phe Phe Leu Pro Leu Phe Cys Thr Tyr Leu Ala
 130 135 140
 Gln Leu Leu Leu Ser Leu Asn Pro Asn Ala Arg Val Ile Ser Thr Ser
 145 150 155 160
 Leu Ser Tyr Ala Ile Pro Pro Met Leu Asn Pro Ile Ile
 165 170

<210> 2675

<211> 173

<212> PRT

<213> Unknown (DRU44441)

<400>2675

Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His
 1 5 10 15
 Val Ile Val Asn Asn Thr Ser Met Ile Ser Ile Phe Ser Ala Val Phe
 20 25 30
 Met Phe Asn Ser Ile Ile Val Ala Ser Met Val Ser Leu Val Thr Asn
 35 40 45
 Ile Ser Phe Cys Lys Ser Asn Val Ile Gln Ser Tyr Phe Cys Asp His
 50 55 60
 Gly Pro Met Phe Arg Met Ala Cys Asn Asp Asn Ile Ile His Glu Ile
 65 70 75 80
 Met Gly Phe Leu Tyr Thr Thr Leu Tyr Leu Ile Ala Pro Met Leu Val
 85 90 95
 Ile Phe Leu Ser Tyr Leu Gly Ile Phe Leu Val Val Ser Lys Ile Ala
 100 105 110
 Thr Trp Glu Arg Arg Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu
 115 120 125
 Leu Phe Val Gly Ile Tyr Phe Leu Pro Ile Phe Phe Thr Tyr Leu Thr
 130 135 140
 Ser Leu Leu Leu Phe Ser Thr Ser Asn Ser Arg Val Ile Ser Thr Ser
 145 150 155 160
 Leu Ala Tyr Ala Ile Pro Pro Met Leu Asn Pro Ile Ile
 165 170

<210> 2676

<211> 344

<212> PRT

<213> Unknown (ICTORDA (fish1 L09217 1079242) Ngai-J 93)

<400>2676

Met Thr Ser Val Leu Asn Ala Leu Ser Ala Asn Ala Thr Phe Ile Arg
 1 5 10 15
 Pro Ser Thr Phe Tyr Ile Asn Gly Phe Tyr Asn Ile Pro His Thr Lys
 20 25 30
 Tyr Tyr Tyr Ala Phe Leu Cys Ile Ala Tyr Ala Val Thr Val Leu Gly
 35 40 45
 Asn Ser Phe Ile Met Cys Thr Ile Tyr Leu Ala Arg Ser Leu His Thr

| | | |
|---|-----|-----|
| 50 | 55 | 60 |
| Ala Lys Tyr Ile Thr Val Phe Asn Leu Ala Leu Ser Asp Leu Gly Gly | | |
| 65 | 70 | 75 |
| Ser Ser Ala Leu Ile Pro Lys Leu Ile Asp Thr Phe Leu Phe Glu Asn | | 80 |
| | 85 | 90 |
| Gln Val Ile Ser Tyr Glu Ala Cys Leu Ala Asn Met Phe Phe Val Leu | | 95 |
| | 100 | 105 |
| Phe Phe Met Thr Val Gln Ser Leu Thr Leu Leu Val Met Ala Tyr Asp | | 110 |
| | 115 | 120 |
| Arg Val Val Ala Ile Cys Phe Pro Leu Arg Tyr Asn Val Ile Val Thr | | 125 |
| | 130 | 135 |
| Lys Glu Ala Met Thr Leu Ile Ile Val Ile Thr Trp Ile Phe Ser Ile | | 140 |
| | 145 | 150 |
| Ser Ile Ile Ala Leu Leu Val Ala Leu Ile Thr Arg Leu Ser Phe Cys | | 155 |
| | 165 | 170 |
| Arg Ser Val Ile Ile Asn Ser Tyr Phe Cys Asp His Gly Pro Ile Leu | | 175 |
| | 180 | 185 |
| Ile Leu Ala Cys Asn Asp Lys Phe Ile Asn Arg Val Met Ala Ile Gly | | 190 |
| | 195 | 200 |
| Cys Phe Val Val Leu Asp Cys Val Pro Phe Leu Leu Ile Ile Val Ser | | 205 |
| | 210 | 215 |
| Tyr Ile Cys Ile Gly Ile Ala Leu Met Asn Ile Ser His Gly Leu Glu | | 220 |
| | 225 | 230 |
| Arg Arg Lys Ala Met Lys Thr Cys Thr Ser His Leu Ile Leu Val Ala | | 235 |
| | 245 | 250 |
| Leu Phe Tyr Leu Pro Phe Ile Gly Thr Asn Ile Thr Ser Leu Thr Ser | | 255 |
| | 260 | 265 |
| Ser Ile Asn Ala Asn Asp Arg Ile Leu Asn Ser Thr Leu Thr Gln Ile | | 270 |
| | 275 | 280 |
| Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Lys Thr Glu Glu | | 285 |
| | 290 | 295 |
| Val Met Gln Ala Val Lys Val Leu Tyr Lys Arg Ala Lys Ala Val Val | | 300 |
| | 305 | 310 |
| Ile Cys Asp Ile Pro Asn Gly Gln Val Phe Gln Pro Trp Val Gly Val | | 315 |
| | 325 | 330 |
| Asp Ser Lys Lys Lys Thr Phe Cys | | 335 |
| | 340 | |

<210> 2677

<211> 321

<212> PRT

<213> Unknown (ICTORDB (fish3 L09218 1079244) Ngai-J 93)

<400>2677

| | |
|---|-----|
| Met Ala Asp Asn Ile Thr Ser Ile Leu Ser Leu Thr Ser Thr Asn Ala | |
| 1 | 5 |
| Thr Phe Ile Arg Pro Ser Thr Phe Tyr Ile Thr Gly Leu Tyr Asn Ile | 10 |
| | 15 |
| | 20 |
| Pro His Ala Lys Tyr Tyr Tyr Leu Phe Leu Cys Phe Val Tyr Thr Val | 25 |
| | 30 |
| | 35 |
| Thr Phe Leu Gly Asn Ser Phe Ile Met Gly Thr Ile Tyr Leu Ala Arg | 40 |
| | 45 |
| | 50 |
| Ser Leu His Thr Ala Lys Tyr Ile Ala Val Phe Asn Leu Ala Leu Ser | 55 |
| | 60 |
| | 65 |
| Asp Leu Cys Gly Ser Ser Ala Leu Ile Pro Lys Leu Leu Asp Met Leu | 70 |
| | 75 |
| | 80 |
| | 85 |
| Leu Phe Glu Asn Gln Ser Ile Ser Tyr Glu Ala Cys Leu Ser Asn Met | 90 |
| | 95 |
| | 100 |
| Phe Phe Val Tyr Cys Phe Met Thr Leu Gln Cys Leu Thr Leu Leu Ala | 105 |
| | 110 |
| | 115 |
| Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Tyr Pro Leu Arg Tyr His | 120 |
| | 125 |


```

      130              135              140
Ala Ile Val Thr Lys Ala Ala Met Ile Phe Ile Ile Gly Ala Met Trp
145              150              155              160
Val Leu Ser Val Ser Val Asn Ala Val Leu Val Ala Leu Ile Thr Arg
      165              170              175
Leu Ser Phe Cys Arg Ser Thr Thr Val Tyr Ser Tyr Phe Cys Asp His
      180              185              190
Gly Pro Ile Tyr Lys Leu Ala Cys Asn Asp Asn Thr Ile Asn Ser Ile
      195              200              205
Met Gly Asn Val Cys Thr Ala Thr Leu Leu Tyr Phe Pro Leu Ile Leu
      210              215              220
Ile Ile Ala Ser Tyr Val Cys Ile Gly Phe Ala Leu Gln Lys Ile Ala
225              230              235              240
His Gly Val Glu Gln Val Lys Ala Met Lys Thr Cys Thr Ser His Leu
      245              250              255
Ile Leu Val Ala Met Phe Tyr Leu Pro Ile Ile Ser Val Tyr Thr Val
      260              265              270
Ala Leu Thr Thr Arg Ile Asp Thr Asn Ile Arg Ile Ile Asn Thr Ala
      275              280              285
Leu Thr Gln Thr Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu
      290              295              300
Lys Thr Glu Glu Val Met Gln Ala Ile Lys Leu Leu Tyr Lys His Ile
305              310              315              320
Arg

```

<210> 2678

<211> 328

<212> PRT

<213> Unknown (ICTORDC (fish32A L09219 1079245) Ngai-J 93)

<400>2678

```

Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
1      5      10      15
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
      20      25      30
Tyr Tyr Phe Ala Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
      35      40      45
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
      50      55      60
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
65      70      75      80
Thr Asn Val Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
      85      90      95
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Leu Thr Phe
      100      105      110
Phe Phe Ser Ser Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
      115      120      125
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr Asn Ala Ile Val Asn
      130      135      140
Asn Ser Phe Met Phe Ala Ser Leu Thr Ala Ile Trp Ile Phe Asn Val
145      150      155      160
Val Met Asn Gly Thr Leu Val Val Leu Ile Thr Arg Leu Ser Phe Cys
      165      170      175
Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
      180      185      190
Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
      195      200      205
Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Phe Ser
210      215      220
Tyr Leu Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 225 | | 230 | | 235 | | 240 | | | | | | | | | |
| Arg | Leu | Lys | Ala | Leu | Lys | Thr | Cys | Ile | Ser | His | Leu | Leu | Val | Val | Gly |
| | | | 245 | | | | | | 250 | | | | | 255 | |
| Val | Phe | Phe | Leu | Pro | Ile | Val | Gly | Thr | Tyr | Leu | Ala | Ala | Val | Thr | Phe |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Ser | Leu | His | Pro | Asn | Ala | Arg | Ile | Ile | Asn | Thr | Ser | Leu | Ser | Arg | Thr |
| | | 275 | | | | | 280 | | | | 285 | | | | |
| Ile | Pro | Pro | Met | Leu | Asn | Pro | Ile | Ile | Tyr | Val | Leu | Asn | Thr | Lys | Asp |
| | 290 | | | | | 295 | | | | 300 | | | | | |
| Phe | Arg | Val | Phe | Ile | Val | Lys | Met | Leu | Lys | Lys | Lys | Thr | Thr | Ile | Ile |
| 305 | | | | | 310 | | | | | 315 | | | | 320 | |
| Ser | Gln | Val | His | Ala | Leu | Ala | Lys | | | | | | | | |
| | | | | 325 | | | | | | | | | | | |

<210> 2679

<211> 328

<212> PRT

<213> Unknown (ICTORDD (fish22 fish202 L09220 1079243) Ngai-J 93)

<400>2679

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Glu | Gly | Asn | Ile | Thr | Asn | Val | Lys | Asn | Phe | Val | Ile | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Pro | Gly | Leu | Pro | Pro | Asn | Tyr | Tyr | Gly | Leu | Val | Ser | Val | Val | Met |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Phe | Val | Tyr | Val | Cys | Thr | Leu | Ile | Gly | Asn | Cys | Thr | Phe | Phe | Thr |
| | | 35 | | | | 40 | | | | | 45 | | | | |
| Leu | Phe | Leu | Arg | Glu | Lys | Ser | Leu | Gln | Lys | Pro | Met | Tyr | Tyr | Ile | Met |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Leu | Asn | Leu | Ala | Ala | Ser | Asp | Val | Leu | Phe | Ser | Thr | Thr | Thr | Leu | Pro |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Lys | Ile | Ile | Ala | Arg | Tyr | Trp | Phe | Gly | Asp | Gly | Ser | Ile | Ser | Phe | Val |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Gly | Cys | Phe | Ile | Gln | Met | Gln | Phe | Val | His | Tyr | Phe | Ala | Thr | Val | Asn |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ala | Leu | Val | Leu | Ala | Val | Met | Ala | Phe | Asp | Arg | Tyr | Val | Ala | Val | Cys |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Asn | Pro | Leu | Arg | Tyr | Val | Asn | Ile | Val | Lys | Glu | Ser | Thr | Ile | Leu | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Cys | Val | Val | Ser | Trp | Leu | Leu | Ala | Glu | Pro | Thr | Val | Leu | Thr | Thr |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Val | Ile | Arg | Ala | Thr | Ser | Leu | Pro | Tyr | Cys | Ala | Ser | Asn | Thr | Val | Ile |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Gln | Cys | Tyr | Cys | Asp | His | Val | Ser | Val | Thr | Lys | Leu | Ala | Cys | Ile | Asp |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Arg | Thr | Pro | Tyr | Ala | Phe | Pro | Ala | Leu | Val | Ser | Ala | Leu | Val | Met | Leu |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Leu | Thr | Pro | Leu | Ala | Phe | Ile | Leu | Phe | Ser | Tyr | Gly | Ser | Ile | Ile | Val |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Thr | Val | Phe | Arg | Thr | Ser | Ser | Thr | Arg | Gly | Arg | Leu | Lys | Thr | Leu | Ser |
| 225 | | | | | 230 | | | | | 235 | | | | 240 | |
| Thr | Cys | Ser | Ser | Gln | Leu | Ile | Ile | Ile | Thr | Leu | Phe | Phe | Leu | Pro | Arg |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Cys | Leu | Asn | Tyr | Leu | Ser | Ser | Ser | Leu | Gly | Ile | His | Ile | Asn | Ala | Asp |
| | | 260 | | | | | | 265 | | | | | 270 | | |
| Ile | Gln | Ile | Leu | Val | Ile | Met | Leu | Tyr | Ser | Leu | Leu | Pro | Pro | Met | Ile |
| | 275 | | | | | 280 | | | | | | 285 | | | |
| Asn | Pro | Val | Ile | Tyr | Cys | Leu | Arg | Thr | Lys | Glu | Ala | Lys | Glu | Cys | Leu |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Lys | Arg | Ser | Leu | Asn | Arg | Ser | Ser | Phe | Val | Gln | Phe | Leu | Lys | Ile | Asn |
| 305 | | | | | 310 | | | | | 315 | | | | 320 | |
| Val | Gln | Val | Ser | Thr | Leu | Ser | Asn | | | | | | | | |

325

<210> 2680

<211> 317

<212> PRT

<213> Unknown (ICTORDE (fish47 L09221 1079249) Ngai-J 93)

<400>2680

```

Met Asn Ser Thr Asn Ser Thr Asp Ser Phe Asp Lys Gly Phe Tyr Leu
 1           5           10           15
Ile Ala Tyr Asn Ser Leu Gly Asn Lys Asn Tyr Leu Ile Leu Ala Leu
 20           25           30
Gly Ile Ile Tyr Leu Ile Thr Leu Leu Cys Asn Phe Thr Leu Leu Ala
 35           40           45
Ile Ile Leu Met Asn Ser Ser Leu Gln Asn Pro Lys Phe Leu Ala Val
 50           55           60
Phe Asn Leu Ala Val Val Asp Ile Ser Ile Asn Ser Val Ile Ile Pro
 65           70           75           80
Gln Met Val Pro Val Phe Val Phe Asn Leu Asn His Ile Ser Phe Glu
 85           90           95
Ser Cys Phe Ser Gln Met Phe Phe Met His Phe Phe Gly Asp Met Glu
100           105           110
Ser Phe Ser Leu Ala Leu Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys
115           120           125
Phe Pro Leu Arg Tyr Pro Thr Ile Asn Thr Asn Met Arg Met Val Leu
130           135           140
Ile Ile Ala Ser Leu Trp Phe Leu Val Phe Leu Ile Glu Leu Tyr Pro
145           150           155           160
Val Ala Leu Ala Ser Gly Leu Ser Tyr Cys Arg Ser Arg Val Val Pro
165           170           175
Ser Cys Cys Cys Glu His Gly Pro Val Tyr Asn Leu Ala Cys Gly Asp
180           185           190
Ile Ser Tyr Asn Lys Arg Leu Ala Leu Ala Lys Thr Leu Val Val Leu
195           200           205
Leu Gly Pro Leu Thr Phe Ile Ile Cys Ser Tyr Val Ile Val Val Val
210           215           220
Ala Val Leu Arg Ile Ala Ser Pro Thr Gln Cys Trp Lys Ala Phe Asn
225           230           235           240
Thr Cys Leu Thr His Met Ile Leu Val Leu Ile Tyr Tyr Leu Pro Ile
245           250           255
Ile Leu Ala Tyr Ile Leu Gly Asn Leu Lys Leu Leu Gln Ser Ala Asp
260           265           270
Leu Tyr Thr Ala Gly Leu Thr Val Cys Val Thr Leu Pro Ala Met Leu
275           280           285
Asn Pro Ile Ile Tyr Ser Leu Lys Thr Glu Glu Leu Gln Asp Lys Leu
290           295           300
Leu Lys Phe Ile Lys Pro Gln Lys Val Ser Asn Thr Val
305           310           315

```

<210> 2681

<211> 313

<212> PRT

<213> Unknown (ICTORDF (fish8 L09222 1079250) Ngai-J 93)

<400>2681

```

Met Leu Ala Pro Val Gln Asn Ile Ser Phe Thr Thr Phe Thr Leu Thr
 1           5           10           15
Gly Phe His Asp Leu Gly Glu Trp Gly Pro Ile Leu Ser Ile Pro Tyr
 20           25           30
Leu Leu Met Phe Leu Leu Ser Ser Thr Ser Asn Leu Thr Leu Ile Tyr
 35           40           45

```

```

Leu Ile Ile Ser Gln Arg Ala Leu His Ser Pro Met Cys Ile Leu Ile
 50                      55                      60
Gly Leu Met Ala Val Val Asp Leu Ser Met Pro Ile Phe Cys Val Pro
65                      70                      75                      80
Asn Met Leu Leu Ser Phe Leu Phe Asn Trp Lys Gly Ile Ser Leu Val
                      85                      90                      95
Gly Cys Leu Val Gln Met Phe Cys Ile His Cys Ala Gly Thr Phe Gln
                      100                      105                      110
Ser Thr Ile Leu Leu Trp Met Ala Leu Asp Arg Phe Phe Ala Ile Cys
                      115                      120                      125
Arg Pro Leu Tyr Tyr Gln Lys Tyr Met Gly Met Pro Asn Phe Leu Lys
                      130                      135                      140
Phe Ile Ile Phe Pro Val Ile Arg Asn Leu Phe Phe Ile Thr Thr Ile
145                      150                      155                      160
Val Ser Trp Ala Gly Lys Leu Thr Phe Cys Glu Thr Asn Glu Ile Asp
                      165                      170                      175
His Cys Val Cys Glu His Met Ala Leu Val Gln Leu Ala Cys Gly Asp
                      180                      185                      190
Ile Ser Ile Asn Asn Ala Leu Gly Leu Leu Thr Val Phe Leu Thr Ile
                      195                      200                      205
Thr Ala Asp Phe Ile Phe Ile Thr Ile Ser Tyr Ile Val Ile Leu Val
210                      215                      220
Ser Ile Leu Arg Ser Gly Lys Ala Cys Leu Lys Ala Val Asn Thr Cys
225                      230                      235                      240
Ile Thr His Ile Ile Val Met Thr Val Ser Leu Thr Phe Ala Leu Ile
                      245                      250                      255
Ala Phe Leu Ser Tyr Arg Ile Arg Asn Phe Ser Pro Ser Ser Arg Val
260                      265                      270
Phe Leu Ser Thr Met Tyr Leu Phe Ile Pro Ser Cys Phe Asn Pro Ile
275                      280                      285
Ile Tyr Gly Val Arg Thr Lys Glu Ile Arg Glu Gln Phe Leu Lys Leu
290                      295                      300
Met Lys Tyr Val Lys Val Phe Pro Lys
305                      310

```

<210> 2682

<211> 328

<212> PRT

<213> Unknown (ICTORDG (fish32D L09223 1079248) Ngai-J 93)

<400>2682

```

Met Asn Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
 1                      5                      10                      15
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
20                      25                      30
Tyr Tyr Phe Val Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
35                      40                      45
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
50                      55                      60
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
65                      70                      75                      80
Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
85                      90                      95
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Phe Thr Phe
100                      105                      110
Phe Phe Phe Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
115                      120                      125
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
130                      135                      140
Asn Ser Phe Met Phe Ala Thr Leu Thr Ala Ile Trp Val Phe Asn Leu
145                      150                      155                      160

```

Val Met Ile Gly Thr Leu Val Val Leu Ile Thr Arg Leu Ser Phe Cys
 165 170 175
 Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
 180 185 190
 Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
 195 200 205
 Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
 210 215 220
 Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
 225 230 235 240
 Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
 245 250 255
 Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Leu Thr Phe
 260 265 270
 Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
 275 280 285
 Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
 290 295 300
 Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Lys Ile
 305 310 315 320
 Ser Gln Val His Ala Leu Ala Lys
 325

<210> 2683

<211> 328

<212> PRT

<213> Unknown (ICTORDH (fish32C L09224 1079247) Ngai-J 93)

<400>2683

Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
 1 5 10 15
 Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
 20 25 30
 Tyr Tyr Phe Val Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
 35 40 45
 Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
 50 55 60
 Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Ile Gly Glu
 65 70 75 80
 Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
 85 90 95
 Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Thr Asn Met Phe Phe Thr Phe
 100 105 110
 Phe Phe Ser Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
 115 120 125
 Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
 130 135 140
 Asn Ser Phe Met Phe Ala Thr Leu Thr Ala Ile Trp Val Phe Asn Leu
 145 150 155 160
 Val Ile Phe Gly Thr Thr Val Val Phe Ile Thr Arg Leu Ser Phe Cys
 165 170 175
 Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
 180 185 190
 Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
 195 200 205
 Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
 210 215 220
 Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
 225 230 235 240
 Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
 245 250 255

Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Leu Thr Phe
 260 265 270
 Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
 275 280 285
 Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
 290 295 300
 Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Lys Ile
 305 310 315 320
 Ser Gln Val His Ala Leu Ala Lys
 325

<210> 2684

<211> 328

<212> PRT

<213> Unknown (ICTORDII (fish32B L09225 1079246) Ngai-J 93)

<400>2684

Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
 1 5 10 15
 Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
 20 25 30
 Tyr Tyr Phe Val Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
 35 40 45
 Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
 50 55 60
 Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
 65 70 75 80
 Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
 85 90 95
 Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Phe Thr Phe
 100 105 110
 Phe Phe Ala Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
 115 120 125
 Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
 130 135 140
 Asn Ser Phe Met Phe Val Thr Leu Ile Ala Ile Trp Val Phe Asn Val
 145 150 155 160
 Val Ile Ile Gly Thr Thr Val Val Phe Ile Thr Arg Leu Ser Phe Cys
 165 170 175
 Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
 180 185 190
 Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Tyr Phe
 195 200 205
 Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
 210 215 220
 Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
 225 230 235 240
 Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
 245 250 255
 Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Val Thr Phe
 260 265 270
 Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
 275 280 285
 Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
 290 295 300
 Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Ile Ile
 305 310 315 320
 Ser Gln Val His Ala Leu Ala Lys
 325

<210> 2685

<211> 313

<212> PRT

<213> Unknown (ol1 (RATOL1RECE L34074) Guillaume-D 94)

<400>2685

Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Val Val Phe Leu
 20 25 30
 Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met Ile Ile Leu Val
 35 40 45
 Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr
 50 55 60
 Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
 65 70 75 80
 Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile Ser Tyr Gly Gly
 85 90 95
 Cys Val Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Ser Thr Glu Cys
 100 105 110
 Phe Leu Leu Gly Val Met Ser Leu Asp Arg Phe Leu Ala Ile Cys Arg
 115 120 125
 Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg Cys Leu His Leu
 130 135 140
 Ala Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln Ser
 145 150 155 160
 Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Lys Glu Val Asp His
 165 170 175
 Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Thr
 180 185 190
 Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val Leu Phe Leu Leu
 195 200 205
 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln Ala
 210 215 220
 Val Leu Lys Ile Arg Ser Ala Glu Cys Arg Arg Lys Ala Phe Gly Thr
 225 230 235 240
 Cys Gly Ser His Leu Ile Val Val Val Leu Phe Tyr Gly Thr Ala Ile
 245 250 255
 Tyr Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Arg Gly Lys
 260 265 270
 Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Thr Leu Arg Asn Glu Val Lys Gly Ala Phe Lys Arg Leu
 290 295 300
 Met Lys Arg Ile Ile Leu Ile Gly Lys
 305 310

<210> 2686

<211> 333

<212> PRT

<213> Unknown (F3 (RATOLFP15 A23701) Buck-L 91)

<400>2686

Met Asp Ser Ser Asn Arg Thr Arg Val Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Phe Val Glu Asn Lys Asp Leu Gln Pro Leu Ile Tyr Gly Leu Phe Leu
 20 25 30
 Ser Met Tyr Leu Val Thr Val Ile Gly Asn Ile Ser Ile Ile Val Ala
 35 40 45
 Ile Ile Ser Asp Pro Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Val Asp Ile Cys Phe Ile Ser Thr Thr Val Pro Lys

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Met | Leu | Val | Asn | Ile | Gln | Thr | Gln | Asn | Asn | Val | Ile | Thr | Tyr | Ala | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Ile | Thr | Gln | Ile | Tyr | Phe | Phe | Leu | Leu | Phe | Val | Glu | Leu | Asp | Asn |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Leu | Leu | Thr | Ile | Met | Ala | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | His |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Met | His | Tyr | Thr | Val | Ile | Met | Asn | Tyr | Lys | Leu | Cys | Gly | Phe | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Leu | Val | Ser | Trp | Ile | Val | Ser | Val | Leu | His | Ala | Leu | Phe | Gln | Ser |
| 145 | | | | | 150 | | | | 155 | | | | | 160 | |
| Leu | Met | Met | Leu | Ala | Leu | Pro | Phe | Cys | Thr | His | Leu | Glu | Ile | Pro | His |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Tyr | Phe | Cys | Glu | Pro | Asn | Gln | Val | Ile | Gln | Leu | Thr | Cys | Ser | Asp | Ala |
| | | 180 | | | | | | 185 | | | | 190 | | | |
| Phe | Leu | Asn | Asp | Leu | Val | Ile | Tyr | Phe | Thr | Leu | Val | Leu | Leu | Ala | Thr |
| | 195 | | | | | 200 | | | | | 205 | | | | |
| Val | Pro | Leu | Ala | Gly | Ile | Phe | Tyr | Ser | Tyr | Phe | Lys | Ile | Val | Ser | Ser |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ile | Cys | Ala | Ile | Ser | Ser | Val | His | Gly | Lys | Tyr | Lys | Ala | Phe | Ser | Thr |
| 225 | | | | 230 | | | | | 235 | | | | | 240 | |
| Cys | Ala | Ser | His | Leu | Ser | Val | Val | Ser | Leu | Phe | Tyr | Cys | Thr | Gly | Leu |
| | | | 245 | | | | | 250 | | | | | 255 | | |
| Gly | Val | Tyr | Leu | Ser | Ser | Ala | Ala | Asn | Asn | Ser | Ser | Gln | Ala | Ser | Ala |
| | | 260 | | | | | 265 | | | | | 270 | | | |
| Thr | Ala | Ser | Val | Met | Tyr | Thr | Val | Val | Thr | Pro | Met | Val | Asn | Pro | Phe |
| | 275 | | | | | 280 | | | | | 285 | | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Asp | Val | Lys | Ser | Val | Leu | Lys | Lys | Thr |
| | 290 | | | | 295 | | | | | 300 | | | | | |
| Leu | Cys | Glu | Glu | Val | Ile | Arg | Ser | Pro | Pro | Ser | Leu | Leu | His | Phe | Phe |
| 305 | | | | 310 | | | | | 315 | | | | | 320 | |
| Leu | Val | Leu | Cys | His | Leu | Pro | Cys | Phe | Ile | Phe | Cys | Tyr | | | |
| | | | 325 | | | | | 330 | | | | | | | |

<210> 2687

<211> 313

<212> PRT

<213> Unknown (F5 (RATOLFPROC M64377 RNOLFP17 OLF5 P23266 B23701) Buck-L 91)

<400>2687

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Ser | Thr | Asn | Gln | Ser | Ser | Val | Thr | Glu | Phe | Leu | Leu | Leu | Gly |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Leu | Ser | Arg | Gln | Pro | Gln | Gln | Gln | Gln | Leu | Leu | Phe | Leu | Leu | Phe | Leu |
| | | 20 | | | | | 25 | | | | | 30 | | | |
| Ile | Met | Tyr | Leu | Ala | Thr | Val | Leu | Gly | Asn | Leu | Leu | Ile | Ile | Leu | Ala |
| | 35 | | | | | 40 | | | | | 45 | | | | |
| Ile | Gly | Thr | Asp | Ser | Arg | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ser |
| | 50 | | | | 55 | | | | | 60 | | | | | |
| Asn | Leu | Ser | Phe | Val | Asp | Val | Cys | Phe | Ser | Ser | Thr | Thr | Val | Pro | Lys |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Val | Leu | Ala | Asn | His | Ile | Leu | Gly | Ser | Gln | Ala | Ile | Ser | Phe | Ser | Gly |
| | | | 85 | | | | 90 | | | | | 95 | | | |
| Cys | Leu | Thr | Gln | Leu | Tyr | Phe | Leu | Ala | Val | Phe | Gly | Asn | Met | Asp | Asn |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Phe | Leu | Leu | Ala | Val | Met | Ser | Tyr | Asp | Arg | Phe | Val | Ala | Ile | Cys | His |
| | 115 | | | | | 120 | | | | | 125 | | | | |
| Pro | Leu | His | Tyr | Thr | Thr | Lys | Met | Thr | Arg | Gln | Leu | Cys | Val | Leu | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Val | Gly | Ser | Trp | Val | Val | Ala | Asn | Met | Asn | Cys | Leu | Leu | His | Ile |
| 145 | | | | 150 | | | | | 155 | | | | | 160 | |
| Leu | Leu | Met | Ala | Arg | Leu | Ser | Phe | Cys | Ala | Asp | Asn | Met | Ile | Pro | His |


```

      165      170      175
Phe Phe Cys Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
      180      185      190
His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val
      195      200      205
Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala
      210      215      220
Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr
      225      230      235      240
Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile
      245      250      255
Ala Val Tyr Phe Asn Pro Ser Ser Ser His Leu Ala Gly Arg Asp Met
      260      265      270
Ala Ala Ala Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe
      275      280      285
Ile Tyr Ser Leu Arg Asn Ser Asp Met Lys Ala Ala Leu Arg Lys Val
      290      295      300
Leu Ala Met Arg Phe Pro Ser Lys Gln
      305      310

```

<210> 2688

<211> 311

<212> PRT

<213> Unknown (F6 (RATOLFPROD RNOLFP01 M64378) Buck-L 91)

<400>2688

```

Met Ala Trp Ser Thr Gly Gln Asn Leu Ser Thr Pro Gly Pro Phe Ile
  1      5      10      15
Leu Leu Gly Phe Pro Gly Pro Arg Ser Met Arg Ile Gly Leu Phe Leu
      20      25      30
Leu Phe Leu Val Met Tyr Leu Leu Thr Val Val Gly Asn Leu Ala Ile
      35      40      45
Ile Ser Leu Val Gly Ala His Arg Cys Leu Gln Thr Pro Met Tyr Phe
      50      55      60
Phe Leu Cys Asn Leu Ser Phe Leu Glu Ile Trp Phe Thr Thr Ala Cys
      65      70      75      80
Val Pro Lys Thr Leu Ala Thr Phe Ala Pro Arg Gly Gly Val Ile Ser
      85      90      95
Leu Ala Gly Cys Ala Thr Gln Met Tyr Phe Val Phe Ser Leu Gly Cys
      100      105      110
Thr Glu Tyr Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala
      115      120      125
Ile Cys Leu Pro Leu Arg Tyr Gly Gly Ile Met Thr Pro Gly Leu Ala
      130      135      140
Met Arg Leu Ala Leu Gly Ser Trp Leu Cys Gly Phe Ser Ala Ile Thr
      145      150      155      160
Val Pro Ala Thr Leu Ile Ala Arg Leu Ser Phe Cys Gly Ser Arg Val
      165      170      175
Ile Asn His Phe Phe Cys Asp Ile Ser Pro Trp Ile Val Leu Ser Cys
      180      185      190
Thr Asp Thr Gln Val Val Glu Leu Val Ser Phe Gly Ile Ala Phe Cys
      195      200      205
Val Ile Leu Gly Ser Cys Gly Ile Thr Leu Val Ser Tyr Ala Tyr Ile
      210      215      220
Ile Thr Thr Ile Ile Lys Ile Pro Ser Ala Arg Gly Arg His Arg Ala
      225      230      235      240
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Ile Trp Tyr Gly
      245      250      255
Ser Thr Ile Phe Leu His Val Arg Thr Ser Val Glu Ser Ser Leu Asp
      260      265      270
Leu Thr Lys Ala Ile Thr Val Leu Asn Thr Ile Val Thr Pro Val Leu

```

275 280 285
 Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Glu Ala Leu
 290 295 300
 Arg Arg Thr Val Lys Gly Lys
 305 310

<210> 2689

<211> 317

<212> PRT

<213> Unknown (F12 (RATOLFPROG OLF2 P23268 M64381 D23701) Buck-L 91)

<400>2689

Met Glu Ser Gly Asn Ser Thr Arg Arg Phe Ser Ser Phe Phe Leu Leu
 1 5 10 15
 Gly Phe Thr Glu Asn Pro Gln Leu His Phe Leu Ile Phe Ala Leu Phe
 20 25 30
 Leu Ser Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Met
 35 40 45
 Ala Ile Ile Thr Gln Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
 50 55 60
 Ala Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro
 65 70 75 80
 Lys Met Leu Val Asn Ile Tyr Thr Gln Ser Lys Ser Ile Thr Tyr Glu
 85 90 95
 Asp Cys Ile Ser Gln Met Cys Val Phe Leu Val Phe Ala Glu Leu Gly
 100 105 110
 Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Arg Cys
 115 120 125
 His Pro Leu Cys Tyr Thr Val Ile Val Asn His Arg Leu Cys Ile Leu
 130 135 140
 Leu Leu Leu Leu Ser Trp Val Ile Ser Ile Phe His Ala Phe Ile Gln
 145 150 155 160
 Ser Leu Ile Val Leu Gln Leu Thr Phe Cys Gly Asp Val Lys Ile Pro
 165 170 175
 His Phe Phe Cys Glu Leu Asn Gln Leu Ser Gln Leu Thr Cys Ser Asp
 180 185 190
 Asn Phe Pro Ser His Leu Ile Met Asn Leu Val Pro Val Met Leu Ala
 195 200 205
 Ala Ile Ser Phe Ser Gly Ile Leu Tyr Ser Tyr Phe Lys Ile Val Ser
 210 215 220
 Ser Ile His Ser Ile Ser Thr Val Gln Gly Lys Tyr Lys Ala Phe Ser
 225 230 235 240
 Thr Cys Ala Ser His Leu Ser Ile Val Ser Leu Phe Tyr Ser Thr Gly
 245 250 255
 Leu Gly Val Tyr Val Ser Ser Ala Val Val Gln Ser Ser His Ser Ala
 260 265 270
 Ala Ser Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
 275 280 285
 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Arg Ala Leu Glu Arg
 290 295 300
 Leu Leu Glu Gly Asn Cys Lys Val His His Trp Thr Gly
 305 310 315

<210> 2690

<211> 310

<212> PRT

<213> Unknown (I3 (RATOLFPROK OLF0 P23269 M64385 RNOLFP08 E23701) Buck-L 91)

<400>2690

Met Asn Asn Gln Thr Phe Ile Thr Gln Phe Leu Leu Leu Gly Leu Pro
 1 5 10 15

Ile Pro Glu Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu Val Met
 20 25 30
 Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Val Gln
 35 40 45
 Leu Asp Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
 50 55 60
 Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
 65 70 75 80
 Gln Asn Met Arg Ser Gln Asp Thr Ser Ile Pro Tyr Gly Gly Cys Leu
 85 90 95
 Ala Gln Thr Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu
 100 105 110
 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
 115 120 125
 His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu Val Leu
 130 135 140
 Leu Leu Trp Met Leu Thr Thr Ser His Ala Met Met His Thr Leu Leu
 145 150 155 160
 Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Val Leu Asn Phe Phe
 165 170 175
 Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Ile
 180 185 190
 Asn Glu Leu Met Ile Phe Ile Met Ser Thr Leu Leu Ile Ile Ile Pro
 195 200 205
 Phe Phe Leu Ile Val Met Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu
 210 215 220
 Lys Val Pro Ser Thr Gln Gly Ile Cys Lys Val Phe Ser Thr Cys Gly
 225 230 235 240
 Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
 245 250 255
 Tyr Leu Cys Pro Ala Gly Asn Asn Ser Thr Val Lys Glu Met Val Met
 260 265 270
 Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
 275 280 285
 Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys
 290 295 300
 Ser Met Lys Ile Thr Leu
 305 310

<210> 2691

<211> 312

<212> PRT

<213> Unknown (I8 (RATOLFPROM M64387 RNOLFP09) Buck-L 91)

<400>2691

Met Asn Asn Lys Thr Val Ile Thr His Phe Leu Leu Leu Gly Leu Pro
 1 5 10 15
 Ile Pro Pro Glu His Gln Gln Leu Phe Phe Ala Leu Phe Leu Ile Met
 20 25 30
 Tyr Leu Thr Thr Phe Leu Gly Asn Leu Leu Ile Val Val Leu Val Gln
 35 40 45
 Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
 50 55 60
 Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Leu Lys Leu Leu
 65 70 75 80
 Gln Asn Ile Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala Gly Cys Leu
 85 90 95
 Thr Gln Ile Phe Phe Phe Leu Leu Phe Gly Tyr Leu Gly Asn Phe Leu
 100 105 110
 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
 115 120 125

His Tyr Thr Asn Ile Met Ser His Lys Leu Cys Thr Cys Leu Leu Leu
 130 135 140
 Val Phe Trp Ile Met Thr Ser Ser His Ala Met Met His Thr Leu Leu
 145 150 155 160
 Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu Asn Phe Phe
 165 170 175
 Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
 180 185 190
 Asn Glu Leu Met Ile His Ile Met Gly Val Ile Ile Ile Val Ile Pro
 195 200 205
 Phe Val Leu Ile Val Ile Ser Tyr Ala Lys Ile Ile Ser Ser Ile Leu
 210 215 220
 Lys Val Pro Ser Thr Gln Ser Ile His Lys Val Phe Ser Thr Cys Gly
 225 230 235 240
 Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
 245 250 255
 Tyr Leu Cys Pro Ser Gly Asp Asn Phe Ser Leu Lys Gly Ser Ala Met
 260 265 270
 Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
 275 280 285
 Ser Leu Arg Asn Arg Asp Met Lys Gln Ala Leu Ile Arg Val Thr Cys
 290 295 300
 Ser Lys Lys Ile Ser Leu Pro Trp
 305 310

<210> 2692

<211> 314

<212> PRT

<213> Unknown (I9 (RATOLFP RON OLF9 H23701 M64388 RNOLFP10 P23272) Buck-L 91)

<400>2692

Met Thr Arg Arg Asn Gln Thr Ala Ile Ser Gln Phe Phe Leu Leu Gly
 1 5 10 15
 Leu Pro Phe Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Ile Ile Ile Leu
 35 40 45
 Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
 85 90 95
 Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
 130 135 140
 Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Ser Val Ile Pro His
 165 170 175
 Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
 180 185 190
 His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
 195 200 205
 Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
 210 215 220
 Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser Thr
 225 230 235 240

<212> PRT

<213> Unknown (I15 (RATOLFPOR A37286 M64391 RNOLFP16) Buck-L 91)

<400>2694

```

Met Thr Glu Glu Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Phe
 1          5          10          15
Leu Pro Ile Pro Ser Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
          20          25          30
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
          35          40          45
Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
          50          55          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
65          70          75          80
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Phe Ala Gly
          85          90          95
Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu Ser
          100          105          110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
          115          120          125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
          130          135          140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
145          150          155          160
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
          165          170          175
Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
          180          185          190
His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile Val
          195          200          205
Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala Ser
          210          215          220
Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser Thr
225          230          235          240
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
          245          250          255
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
          260          265          270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
          275          280          285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg Val
          290          295          300
Leu Cys Lys Lys Lys Ile Thr Phe Cys Leu
305          310

```

<210> 2695

<211> 309

<212> PRT

<213> Unknown (RNOLP4 (517366 631861 1083741 S51356) Gat-U 94)

<400>2695

```

Met Met Gly Thr Gly Asn His Ser Ala Val Val Val Phe Val Leu Val
 1          5          10          15
Gly Leu Thr Lys Gln Pro Glu Leu Leu Leu Pro Leu Phe Phe Leu Phe
          20          25          30
Leu Val Ile Tyr Val Leu Thr Val Val Gly Asn Leu Gly Met Ile Leu
          35          40          45
Leu Ile Ile Val Ser Pro Leu His Thr Pro Met Tyr Tyr Phe Leu
          50          55          60
Ser Ser Leu Ser Phe Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro
65          70          75          80
Lys Met Leu Val Asn Phe Leu Gly Lys Lys Asn Phe Ile Thr Tyr Ser

```

85 90 95
 Glu Cys Met Ala Gln Phe Phe Phe Phe Ala Ile Phe Val Val Thr Glu
 100 105 110
 Gly Tyr Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
 115 120 125
 Arg Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Ile Cys Ser Leu
 130 135 140
 Leu Val Leu Val Ala Phe Ser Leu Gly Leu Phe Ser Ala Val Val His
 145 150 155 160
 Thr Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser Tyr Ile Ile Ser
 165 170 175
 His Tyr Phe Cys Asp Ala Leu Pro Leu Leu Lys Leu Ala Cys Ser Asn
 180 185 190
 Thr His Leu Asn Glu Leu Leu Ile Phe Ile Ile Gly Gly Leu Asn Thr
 195 200 205
 Leu Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys
 210 215 220
 Ser Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Ser Lys Ala Phe Gly
 225 230 235 240
 Thr Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile
 245 250 255
 Thr Phe Met Tyr Leu Lys Pro Ser Ser Asn Ser Leu Glu Gln Glu
 260 265 270
 Lys Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro
 275 280 285
 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Arg
 290 295 300
 Phe Ser Val Arg Ser
 305

<210> 2696

<211> 318

<212> PRT

<213> Unknown (TB641 (RNU50949 1256393) Thomas-MB 96)

<400>2696

Met Arg Arg Asn Arg Asn Thr Ser Leu Asp Thr Val Val Thr Asp Phe
 1 5 10 15
 Leu Leu Leu Gly Leu Ala His Pro Pro Asn Leu Arg Thr Phe Leu Phe
 20 25 30
 Leu Val Phe Leu Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu
 35 40 45
 Ile Leu Leu Thr Val Trp Ala Asp Pro Lys Leu His Ala Arg Pro Met
 50 55 60
 Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser
 65 70 75 80
 Val Ile Val Pro Arg Ile Ile Leu Asn Phe Thr Pro Ala Asn Lys Ala
 85 90 95
 Ile Ala Phe Gly Gly Cys Val Ala Gln Leu Tyr Phe Phe His Phe Leu
 100 105 110
 Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr
 115 120 125
 Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Asn Gly Lys
 130 135 140
 Leu Cys Thr Ile Leu Val Ala Gly Ala Trp Val Ala Gly Ser Ile His
 145 150 155 160
 Gly Ser Ile Gln Ala Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro
 165 170 175
 Lys Glu Val Asp Tyr Phe Phe Cys Asp Ile Pro Ala Val Leu Arg Leu
 180 185 190
 Ala Cys Ala Asp Thr Ala Ile Asn Glu Leu Val Thr Phe Val Asp Ile

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| | 195 | | 200 | | 205 |
| Gly | Val | Val | Ala | Ala | Ser |
| | 210 | | | | Cys |
| Asn | Ile | Val | His | Ala | Ile |
| | 225 | | | | Leu |
| Arg | Ala | Phe | Ser | Thr | Cys |
| | | | | | Gly |
| Tyr | Val | Pro | Cys | Ile | Phe |
| | | | | | Ile |
| Phe | Asp | Gly | Ala | Val | Ala |
| | | | | | Val |
| Asn | Pro | Leu | Ile | Tyr | Thr |
| | | | | | Leu |
| Lys | Arg | Leu | Arg | Ala | Gly |
| | | | | | Arg |

<210> 2697

<211> 315

<212> PRT

<213> Unknown (TB567 (RNU50948 1256391) Thomas-MB 96)

<400>2697

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Gln | Arg | Asn | Ala | Thr | Glu | Val | Thr | Asp | Phe | Tyr | Leu | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Gly | Val | Gln | Gln | Asn | Thr | Gln | Cys | Val | Leu | Phe | Ile | Val | Phe | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Val | Ile | Tyr | Val | Thr | Ser | Met | Val | Gly | Asn | Thr | Gly | Met | Ile | Leu | Leu |
| | | | 35 | | | | 40 | | | | | 45 | | | |
| Ile | Asn | Thr | Asn | Ser | Arg | Leu | Gln | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Gln |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Leu | Ala | Phe | Val | Asp | Ile | Cys | Tyr | Thr | Ser | Ala | Ile | Thr | Pro | Lys |
| | 65 | | | | 70 | | | | 75 | | | | | 80 | |
| Met | Leu | Gln | Ser | Phe | Met | Val | Glu | Asp | Cys | Ser | Ile | Ser | Tyr | Thr | Gly |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Cys | Val | Ile | Gln | Leu | Leu | Val | Tyr | Ala | Thr | Phe | Ala | Thr | Ser | Asp | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Tyr | Leu | Leu | Ala | Val | Met | Ala | Val | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Lys |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Pro | Leu | Arg | Tyr | Pro | Ile | Ile | Met | Ser | Arg | Gln | Val | Cys | Leu | Leu | Leu |
| | 130 | | | | 135 | | | | | 140 | | | | | |
| Val | Ala | Leu | Ser | Tyr | Leu | Met | Gly | Ser | Ile | Asn | Ser | Ser | Val | His | Thr |
| | 145 | | | | 150 | | | | 155 | | | | | 160 | |
| Gly | Phe | Thr | Phe | Ser | Leu | Ser | Tyr | Cys | Asn | Ser | Lys | Asn | Ile | Asn | His |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Phe | Phe | Cys | Asp | Val | Val | Pro | Ile | Ile | Ser | Leu | Ser | Cys | Ser | Asn | Thr |
| | | | 180 | | | | 185 | | | | | 190 | | | |
| Asp | Ile | Asn | Ile | Met | Leu | Leu | Ile | Val | Phe | Val | Gly | Phe | Asn | Leu | Thr |
| | 195 | | | | | 200 | | | | | 205 | | | | |
| Phe | Thr | Val | Leu | Val | Ile | Ile | Phe | Ser | Tyr | Ile | Tyr | Ile | Met | Ala | Ala |
| | 210 | | | | 215 | | | | | | 220 | | | | |
| Ile | Leu | Lys | Met | Ser | Ser | Thr | Ala | Gly | Arg | Lys | Lys | Thr | Phe | Ser | Thr |
| | 225 | | | | 230 | | | | 235 | | | | | 240 | |
| Cys | Ala | Ser | His | Leu | Thr | Ala | Val | Thr | Ile | Phe | Tyr | Gly | Thr | Leu | Ser |
| | | | 245 | | | | | 250 | | | | | 255 | | |
| Tyr | Met | Tyr | Leu | Gln | Pro | His | Ser | Asp | Asn | Ser | Glu | Glu | Asn | Met | Lys |
| | | | 260 | | | | 265 | | | | | | 270 | | |
| Val | Ala | Ser | Val | Phe | Tyr | Gly | Ile | Val | Ile | Pro | Met | Leu | Asn | Pro | Leu |
| | 275 | | | | | 280 | | | | | | 285 | | | |
| Ile | Tyr | Ser | Leu | Arg | Asn | Lys | Glu | Val | Lys | Glu | Gly | Phe | Lys | Ala | Met |
| | 290 | | | | 295 | | | | | 300 | | | | | |
| Ser | Arg | Arg | Phe | Leu | Arg | Met | Lys | Ser | Asn | Pro | | | | | |

305

310

315

<210> 2698

<211> 311

<212> PRT

<213> Unknown (TB334 (RNU50947 1256389) Thomas-MB 96)

<400>2698

Met Glu Asn Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser
 1 5 10 15
 Gly Phe Pro Glu Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met
 20 25 30
 Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly
 35 40 45
 Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu
 50 55 60
 Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu
 65 70 75 80
 Phe Asn Val Gln Thr Gln Cys His Thr Ile Ser Tyr Thr Gly Cys Leu
 85 90 95
 Thr Gln Met Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe
 100 105 110
 Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
 115 120 125
 His Tyr Ser Thr Ile Met Asn Ala Arg Ile Cys Val Leu Met Leu Ile
 130 135 140
 Leu Cys Trp Ile Leu Thr Asn Val Val Ala Leu Thr His Thr Leu Leu
 145 150 155 160
 Met Ala Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe
 165 170 175
 Cys Asp Val Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val
 180 185 190
 Asn Glu Leu Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro
 195 200 205
 Phe Val Ser Ile Val Ile Ser Tyr Val His Ile Val Phe Ala Val Leu
 210 215 220
 Arg Ile Gln Ser Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser
 225 230 235 240
 Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val
 245 250 255
 Tyr Leu Phe Pro Ser Ser Val Glu Thr Thr Glu Lys Asp Val Ala Ala
 260 265 270
 Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
 275 280 285
 Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Lys Arg Leu Leu Ser
 290 295 300
 His Arg Arg Ile Leu Ser Ser
 305 310

<210> 2699

<211> 312

<212> PRT

<213> Unknown (OR12 (423700 S29708) Raming-K 93)

<400>2699

Met Ile Met Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Pro Pro Glu His Trp His Leu Phe Tyr Thr Leu Leu Leu
 20 25 30
 Ala Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Ile Leu
 35 40 45

Ile Leu Leu Asp Ser Asn Leu His Ile Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Asn Gln Asp Thr Ser Ile Thr Tyr Thr Gly
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Ser Met Val Phe Ala Gly Met Glu Ile
 100 105 110
 Phe Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Leu
 115 120 125
 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Phe Cys Val Cys Leu
 130 135 140
 Gly Ser Leu Ser Trp Val Phe Asn Val Leu Tyr Ser Met Leu His Thr
 145 150 155 160
 Leu Leu Leu Ala Arg Leu Ser Phe Cys Lys Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Leu Leu Ile Val
 195 200 205
 Ile Pro Phe Leu Leu Ile Val Met Thr Tyr Val Gln Ile Val Cys Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Thr Arg Ala Ile Tyr Lys Ile Phe Ser Thr
 225 230 235 240
 Cys Gly Ser His Leu Ser Thr Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
 260 265 270
 Val Met Ala Met Met Ile Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Val Arg Val
 290 295 300
 Leu Ile Lys Lys Lys Ile Ser Leu
 305 310

<210> 2700

<211> 304

<212> PRT

<213> Unknown (OR14 (423701) Raming-K 93)

<400>2700

Ser Val Thr Glu Phe Ile Leu Ala Gly Leu Thr Asp Gln Pro Gly Leu
 1 5 10 15
 Arg Met Pro Leu Phe Phe Leu Phe Leu Gly Phe Tyr Met Val Thr Val
 20 25 30
 Val Gly Asn Leu Ile Gly Leu Phe Leu Ile Gly Leu Asn Ser His Leu
 35 40 45
 His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Val Val Asp Phe
 50 55 60
 Cys Phe Ser Ser Thr Ile Ile Pro Lys Met Leu Met Ser Phe Ile Ser
 65 70 75 80
 Lys Lys Asn Ile Ile Ser His Ser Gly Cys Met Thr Gln Leu Phe Phe
 85 90 95
 Phe Cys Phe Phe Val Val Ser Glu Thr Phe Ile Leu Ser Ala Met Ala
 100 105 110
 Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Met Tyr Thr Val Thr
 115 120 125
 Met Ser Pro Gln Val Cys Leu Leu Leu Leu Gly Ala Tyr Val Met
 130 135 140
 Gly Phe Ser Glu Ala Met Ala His Thr Gly Asn Leu Met Asn Leu Thr
 145 150 155 160

Phe Cys Ala Asp Asn Leu Val Asn His Phe Met Cys Asp Ile Leu Pro
 165 170 175
 Leu Leu Glu Leu Ser Cys Asn Ser Thr Phe Ile Asn Glu Leu Val Val
 180 185 190
 Phe Ile Val Val Ala Ile Asp Ile Ala Val Pro Ile Val Ser Ile Phe
 195 200 205
 Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile Leu Arg Met His Ser Thr
 210 215 220
 Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val
 225 230 235 240
 Val Cys Leu Leu Phe Gly Ser Gly Ala Phe Met Tyr Leu Lys Leu Pro
 245 250 255
 Ser Ile Leu Pro Leu Asp Gln Gly Lys Val Ser Ser Leu Phe Tyr Thr
 260 265 270
 Ile Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
 275 280 285
 Asp Val Lys Val Ala Leu Arg Lys Thr Leu Gly Lys Ile Ile Leu Ser
 290 295 300

<210> 2701

<211> 307

<212> PRT

<213> Unknown (OR18 (423702) Raming-K 93)

<400>2701

Met Gly Glu Asn Asn Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
 1 5 10 15
 Gln Asp Pro Asp Gly Arg Lys Ala Leu Phe Val Ile Phe Phe Leu Ile
 20 25 30
 Tyr Ile Val Thr Met Met Gly Asn Leu Leu Ile Val Val Thr Val Ile
 35 40 45
 Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
 50 55 60
 Ser Leu Leu Asp Ala Leu Phe Ser Thr Ala Ile Ser Pro Lys Leu Ile
 65 70 75 80
 Ala Asp Leu Leu Tyr Asp Gln Lys Thr Ile Ser Phe Arg Ala Cys Met
 85 90 95
 Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
 100 105 110
 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
 115 120 125
 His Tyr Leu Ala Ile Met Asn Arg Arg Val Cys Ile Thr Leu Leu Ile
 130 135 140
 Phe Ala Trp Thr Gly Gly Phe Thr His Ser Leu Ile Gln Ile Val Phe
 145 150 155 160
 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
 165 170 175
 Cys Asp Met Ser Pro Leu Leu Val Leu Ala Cys Thr Asp Thr Tyr Phe
 180 185 190
 Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Val Asn Cys Ile Val Ile
 195 200 205
 Phe Thr Leu Leu Leu Gly Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
 210 215 220
 Thr Gln Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
 225 230 235 240
 His Ile Leu Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
 245 250 255
 Ala Arg Pro Val Tyr Asn Phe Pro Ile Asp Lys Cys Ile Thr Val Phe
 260 265 270
 Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
 275 280 285

Asn Ser Glu Ile Lys Ser Cys Met Lys Lys Leu Trp Cys Lys Met Leu
 290 295 300
 His Ala Asp
 305

<210> 2702

<211> 314

<212> PRT

<213> Unknown (OR5 (423703 444281) Raming-K 93)

<400>2702

Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Pro Glu His Gln His Val Gly Tyr Ala Leu Phe Leu
 20 25 30
 Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
 35 40 45
 Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
 85 90 95
 Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
 130 135 140
 Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
 165 170 175
 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
 180 185 190
 Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
 195 200 205
 Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
 210 215 220
 Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Ser
 225 230 235 240
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
 245 250 255
 Pro Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
 260 265 270
 Val Met Ser Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Ile Ile
 290 295 300
 Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
 305 310

<210> 2703

<211> 305

<212> PRT

<213> Unknown (OR37 (423699 S29711 265086) Raming-K 93)

<400>2703

Leu Leu Leu Gly Leu Ser Gly Tyr Pro Lys Thr Glu Ile Leu Tyr Phe
 1 5 10 15
 Val Ile Val Leu Val Met Tyr Leu Val Ile His Thr Gly Asn Gly Val

20 25 30
 Leu Ile Ile Ala Ser Ile Phe Asp Ser His Leu His Thr Pro Met Tyr
 35 40 45
 Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser
 50 55 60
 Ser Val Pro Ser Thr Leu Val Ser Leu Ile Ser Lys Lys Arg Asn Ile
 65 70 75 80
 Ser Phe Ser Gly Cys Thr Val Gln Met Phe Val Gly Phe Ala Met Gly
 85 90 95
 Ser Thr Glu Cys Leu Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val
 100 105 110
 Ala Ile Cys Asn Pro Leu Arg Tyr Ser Val Ile Met Ser Lys Glu Val
 115 120 125
 Tyr Val Ser Met Ala Ser Ala Ser Trp Phe Ser Gly Gly Ile Asn Ser
 130 135 140
 Val Val Gln Thr Ser Leu Ala Met Arg Leu Pro Phe Cys Gly Asn Asn
 145 150 155 160
 Val Ile Asn His Phe Thr Cys Glu Val Leu Ala Val Leu Lys Leu Ala
 165 170 175
 Cys Ala Asp Ile Ser Leu Asn Ile Val Thr Met Val Ile Ser Asn Met
 180 185 190
 Ala Phe Leu Val Leu Pro Leu Leu Leu Ile Phe Phe Ser Tyr Val Leu
 195 200 205
 Ile Leu Tyr Thr Ile Leu Arg Met Asn Ser Ala Ser Gly Arg Arg Lys
 210 215 220
 Ala Phe Ser Thr Cys Ser Ala His Leu Thr Val Val Val Ile Phe Tyr
 225 230 235 240
 Gly Thr Ile Phe Ser Met Tyr Ala Lys Pro Lys Ser Gln Asp Leu Thr
 245 250 255
 Gly Lys Asp Lys Phe Gln Thr Ser Asp Lys Ile Ile Ser Leu Phe Tyr
 260 265 270
 Gly Val Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn
 275 280 285
 Lys Asp Val Lys Ala Ala Val Lys Tyr Ile Leu Lys Gln Lys Tyr Ile
 290 295 300
 Pro
 305

<210> 2704

<211> 314

<212> PRT

<213> Unknown (RNOLFRECP (1504112) Raming-K 93)

<400>2704

Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
 20 25 30
 Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
 35 40 45
 Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
 65 70 75 80
 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
 85 90 95
 Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
 100 105 110
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
 115 120 125
 Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu

| | | |
|---------------------|---------------------------------|---------------------|
| 130 | 135 | 140 |
| Val Val Leu Ser Trp | Val Leu Thr Thr Phe His | Ala Met Leu His Thr |
| 145 | 150 | 155 |
| Leu Leu Met Ala Arg | Leu Ser Phe Cys Glu Asp | Asn Val Ile Pro His |
| | 165 | 170 |
| Phe Phe Cys Asp Met | Ser Ala Leu Leu Lys Leu Ala Cys | Ser Asp Thr |
| | 180 | 185 |
| Arg Val Asn Glu Val | Val Ile Phe Ile Val Val Ser | Leu Phe Leu Val |
| | 195 | 200 |
| Leu Pro Phe Ala Leu | Ile Ile Met Ser Tyr Val Arg | Ile Val Ser Ser |
| | 210 | 215 |
| Ile Leu Lys Val Pro | Ser Ser Gln Gly Ile Tyr Lys | Ala Phe Ser Thr |
| 225 | 230 | 235 |
| Cys Gly Ser His Leu | Ser Val Val Ser Leu Phe Tyr | Gly Thr Val Ile |
| | 245 | 250 |
| Gly Leu Tyr Leu Cys | Pro Ser Ser Asn Asn Ser Thr | Val Lys Glu Thr |
| | 260 | 265 |
| Val Met Ser Leu Met | Tyr Thr Val Val Thr Pro Met | Leu Asn Pro Phe |
| | 275 | 280 |
| Ile Tyr Ser Leu Arg | Asn Arg Asp Ile Lys Gly Ala | Met Glu Arg Ile |
| | 290 | 295 |
| Phe Cys Lys Arg Lys | Ile Gln Leu Asn Leu | |
| 305 | 310 | |

<210> 2705

<211> 314

<212> PRT

<213> Unknown (1906335A (444281) Raming-K 93)

<400>2705

| |
|---|
| Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly |
| 1 5 10 15 |
| Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu |
| 20 25 30 |
| Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu |
| 35 40 45 |
| Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser |
| 50 55 60 |
| Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys |
| 65 70 75 80 |
| Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly |
| 85 90 95 |
| Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn |
| 100 105 110 |
| Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe |
| 115 120 125 |
| Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu |
| 130 135 140 |
| Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr |
| 145 150 155 160 |
| Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His |
| 165 170 175 |
| Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr |
| 180 185 190 |
| Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val |
| 195 200 205 |
| Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser |
| 210 215 220 |
| Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Ser |
| 225 230 235 240 |
| Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile |

245 250 255
 Pro Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
 260 265 270
 Val Met Ser Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Ile Ile
 290 295 300
 Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
 305 310

<210> 2706

<211> 185

<212> PRT

<213> Unknown (PTE01 (544449) Abe-K 93)

<400>2706

Met Tyr Leu Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Ser Phe Thr
 1 5 10 15
 Ser Thr Thr Leu Pro Lys Met Ile Val Asp Ile Gln Thr Asn Asn Arg
 20 25 30
 Ala Ile Ser Tyr Ser Gly Cys Leu Thr Gln Met Ser Phe Phe Met Leu
 35 40 45
 Phe Gly Cys Leu Asp Ser Leu Leu Leu Thr Ala Met Ala Tyr Asp Arg
 50 55 60
 Phe Val Ala Ile Cys His Pro Leu His Tyr Gln Val Ile Met Asn Pro
 65 70 75 80
 Arg Leu Cys Gly Leu Leu Val Phe Leu Ser Ile Leu Ile Ser Leu Leu
 85 90 95
 Val Ser Gln Leu His Asn Ser Val Val Leu Gln Leu Thr Tyr Phe Lys
 100 105 110
 Ser Val Asp Ile Ser His Phe Phe Cys Asp Pro Ser Leu Leu Leu Asn
 115 120 125
 Leu Ala Cys Ser Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Val
 130 135 140
 Gly Ala Ile Ser Gly Phe Leu Pro Ile Ser Gly Ile Phe Phe Ser Tyr
 145 150 155 160
 Tyr Lys Ile Val Ser Ser Ile Leu Arg Met Pro Ser Pro Gly Gly Lys
 165 170 175
 Tyr Lys Ala Phe Ser Thr Cys Gly Ser
 180 185

<210> 2707

<211> 168

<212> PRT

<213> Unknown (PTE03 (544450) Abe-K 93)

<400>2707

Thr Thr Val Pro Lys Met Leu Ile Asn Leu Gln Lys Gln Asn Lys Ala
 1 5 10 15
 Ile Ser Tyr Ala Gly Cys Ile Thr Gln Leu Ser Phe Val Leu Leu Phe
 20 25 30
 Ala Gly Met Glu Asn Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr
 35 40 45
 Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr Ala Ile Met Lys Ala His
 50 55 60
 Leu Cys Leu Val Met Thr Leu Leu Ser Leu Cys Ile Ser Ile Val Asp
 65 70 75 80
 Ala Leu Leu His Gly Leu Met Ile Leu Arg Leu Ser Phe Cys Thr Phe
 85 90 95
 Leu Glu Ile Pro His Tyr Phe Cys Glu Leu Tyr Gln Val Ile Lys Leu
 100 105 110

Ser Cys Ser Asp Thr Leu Ile Asn Asn Ile Leu Val Tyr Thr Met Thr
 115 120 125
 Ser Thr Leu Gly Gly Val Pro Leu Gly Gly Ile Ile Phe Ser Tyr Phe
 130 135 140
 Lys Ile Ile Ser Ser Ile Leu Arg Met Pro Ser Ser Gly Ser Arg His
 145 150 155 160
 Arg Ala Phe Ser Thr Cys Gly Ser
 165

<210> 2708

<211> 234

<212> PRT

<213> Unknown (PTE33 (544451) Abe-K 93)

<400>2708

Met Tyr Leu Phe Phe Ser Asn Leu Ser Phe Val Asp Ile Tyr Phe Ile
 1 5 10 15
 Ser Gly Thr Ile Pro Lys Ile Leu Val Asn Met Gln Ser Lys Thr Lys
 20 25 30
 Asp Ile Ser Tyr Ile Glu Cys Leu Thr Gln Val Tyr Phe Phe Asn Thr
 35 40 45
 Phe Val Gly Met Asp Asp Val Leu Arg Thr Leu Met Ala Tyr Asp Arg
 50 55 60
 Phe Val Ala Ile Cys Met Pro Leu Lys Tyr Thr Val Ile Met Asn Pro
 65 70 75 80
 Arg Val Cys Thr Leu Leu Val Leu Met Phe Trp Ile Ile Met Phe Cys
 85 90 95
 Ile Ser Leu Ile His Val Leu Leu Met Asn Glu Leu Asn Phe Ser Arg
 100 105 110
 Gly Thr Lys Ile Pro His Phe Phe Cys Glu Leu Ala Gln Val Leu Lys
 115 120 125
 Val Ser Asn Ser Asp Thr His Ile Asn Asn Ile Phe Met Tyr Val Leu
 130 135 140
 Ser Ser Leu Leu Gly Val Ile Pro Met Thr Gly Ile Leu Met Ser Tyr
 145 150 155 160
 Ser Gln Ile Val Ser Ser Leu Leu Arg Met Ser Ser Thr Val Ser Lys
 165 170 175
 Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Cys Val Val Cys Leu
 180 185 190
 Phe Tyr Gly Ser Val Ile Gly Val Tyr Phe Ser Ser Ser Val Val Leu
 195 200 205
 Ser Thr Gln Arg Ile Met Val Ala Ser Leu Met Tyr Thr Val Ile Ser
 210 215 220
 Pro Met Phe Asn Pro Phe Ile Tyr Ser Leu
 225 230

<210> 2709

<211> 234

<212> PRT

<213> Unknown (PTE38 (544452) Abe-K 93)

<400>2709

Met Tyr Leu Phe Phe Ser Asn Leu Ser Phe Asn Asp Ile Cys Ile Ile
 1 5 10 15
 Thr Thr Thr Ile Pro Lys Met Leu Met Asn Val Gln Ser His Asp Gln
 20 25 30
 Ser Ile Thr Tyr Leu Gly Cys Leu Ser Gln Val Tyr Leu Ile Val Asn
 35 40 45
 Phe Gly Ser Ile Glu Ser Cys Leu Leu Ala Val Met Ala Tyr Asp Arg
 50 55 60
 Tyr Val Ala Ile Cys His Pro Leu Lys Tyr Thr Val Ile Met Asn His


```
<210> 2710
<211> 234
<212> PRT
<213> Unknown (PTE45 (544453) Abe-K 93)
```

[illegible]

1657

<212> PRT

<213> Unknown (PTE58 (544454) Abe-K 93)

<400>2711

```

Leu Leu Met Cys Asn Leu Cys Phe Ala Asp Ile Cys Phe Thr Ser Ala
 1           5           10           15
Ser Ile Pro Thr Asn Leu Val Asn Ile Gln Thr Lys Asn Lys Val Ile
          20           25           30
Thr Tyr Glu Gly Cys Ile Ser Gln Val Tyr Phe Phe Ile Leu Phe Gly
          35           40           45
Val Leu Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val
          50           55           60
Ala Ile Cys His Pro Leu His Tyr Thr Val Ile Met Asn Arg Arg Leu
          65           70           75           80
Cys Gly Leu Leu Val Leu Gly Ser Trp Val Thr Thr Ala Leu Asn Ser
          85           90           95
Leu Leu Gln Ser Ser Met Ala Leu Arg Leu Ser Phe Cys Thr Asp Leu
          100          105          110
Lys Ile Pro His Phe Val Cys Glu Leu Asn Gln Leu Val Leu Leu Ala
          115          120          125
Cys Asn Asp Thr Phe Pro Asn Asp Met Val Met Tyr Phe Ala Ala Val
          130          135          140
Leu Leu Gly Gly Gly Pro Leu Ala Gly Ile Leu Tyr Ser Tyr Ser Lys
          145          150          155          160
Ile Val Ser Ser Ile Arg Ala Ile Ser Ser Ser Gln Gly Lys Tyr Lys
          165          170          175
Ala Phe Ser Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr
          180          185          190
Ser Thr Leu Leu Gly Val Tyr Leu Ser Ser Ser Phe Thr Gln Asn Ser
          195          200          205
His Ser Thr Ala Arg Ala Ser Val Met Tyr Ser Val Val Thr Pro Met
          210          215          220
Leu Asn Pro Phe Ile Tyr Phe Phe
          225          230

```

<210> 2712

<211> 312

<212> PRT

<213> Unknown (RATGUST27 (D12820 P34987 A46750) Abe-K 93)

<400>2712

```

Met Ile Leu Asn Cys Asn Pro Phe Ser Gly Leu Phe Leu Ser Met Tyr
 1           5           10           15
Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Val Ser Ser
          20           25           30
Asn Ser His Leu His Asn Leu Met Tyr Phe Phe Leu Ser Asn Leu Ser
          35           40           45
Phe Val Asp Ile Cys Phe Ile Ser Thr Thr Ile Pro Lys Met Leu Val
          50           55           60
Asn Ile His Ser Gln Thr Lys Asp Ile Ser Tyr Ile Glu Cys Leu Ser
          65           70           75           80
Gln Val Tyr Phe Leu Thr Thr Phe Gly Gly Met Asp Asn Phe Leu Leu
          85           90           95
Thr Leu Met Ala Cys Asp Arg Tyr Val Ala Ile Cys His Pro Leu Asn
          100          105          110
Tyr Thr Val Ile Met Asn Leu Gln Leu Cys Ala Leu Leu Ile Leu Met
          115          120          125
Phe Trp Leu Ile Met Phe Cys Val Ser Leu Ile His Val Leu Leu Met
          130          135          140
Asn Glu Leu Asn Phe Ser Arg Gly Thr Glu Ile Pro His Phe Phe Cys
          145          150          155          160

```

Glu Leu Ala Gln Val Leu Lys Val Ala Asn Ser Asp Thr His Ile Asn
 165 170 175
 Asn Val Phe Met Tyr Val Val Thr Ser Leu Leu Gly Leu Ile Pro Met
 180 185 190
 Thr Gly Ile Leu Met Ser Tyr Ser Gln Ile Ala Ser Ser Leu Leu Lys
 195 200 205
 Met Ser Ser Ser Val Ser Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser
 210 215 220
 His Leu Cys Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Ile Val Tyr
 225 230 235 240
 Phe Cys Ser Ser Val Leu His Ser Thr His Lys Lys Met Ile Ala Ser
 245 250 255
 Leu Met Tyr Thr Val Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr Ser
 260 265 270
 Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu Phe Ile Arg
 275 280 285
 Val Ala Ser Cys Pro Leu Trp Ser Lys Asp Phe Arg Pro Lys Phe Ile
 290 295 300
 Leu Lys Pro Glu Arg Gln Ser Leu
 305 310

<210> 2713

<211> 222

<212> PRT

<213> Unknown (K7 (MUSODORECA L14566 293754 464305 C40745) Ressler-KJ 93)

<400>2713

Phe Phe Leu Ser His Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn
 1 5 10 15
 Thr Val Pro Gln Met Leu Val Asn Leu Leu Asp Pro Val Lys Pro Ile
 20 25 30
 Ser Tyr Ala Gly Cys Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala
 35 40 45
 Ile Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val
 50 55 60
 Ala Ile Cys His Pro Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val
 65 70 75 80
 Cys Ser Thr Met Ala Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser
 85 90 95
 Leu Ile His Leu Val Leu Leu Leu Pro Leu Pro Phe Cys Val Ser Gln
 100 105 110
 Lys Val Asn His Phe Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala
 115 120 125
 Cys Ala Asp Thr His Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val
 130 135 140
 Ser Val Leu Val Gly Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys
 145 150 155 160
 Ile Leu Gly Ala Ile Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys
 165 170 175
 Ala Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr
 180 185 190
 Gly Thr Ala Ile Val Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys
 195 200 205
 Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn
 210 215 220

<210> 2714

<211> 222

<212> PRT

<213> Unknown (M50 (MUSODORECB L14567 293756 P34986 OLF5) Buck 93)

<400>2714

```

Tyr Phe Leu Ser Thr Met Ser Phe Leu Glu Ala Trp Tyr Ile Ser Val
 1           5           10           15
Thr Val Pro Lys Met Leu Ala Gly Phe Leu Phe His Pro Asn Thr Ile
          20           25           30
Ser Phe Leu Gly Cys Met Thr Gln Leu Tyr Phe Phe Met Ser Leu Ala
          35           40           45
Cys Thr Glu Cys Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
          50           55           60
Ala Ile Cys Trp Pro Leu Arg Tyr Pro Val Met Met Thr Thr Gly Phe
65           70           75           80
Cys Val Gln Leu Thr Ile Ser Ser Trp Val Ser Gly Phe Thr Ile Ser
          85           90           95
Met Ala Lys Val Tyr Phe Leu Ser Arg Val Ala Phe Cys Gly Asn Asn
          100          105          110
Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Ile Leu Lys Leu Ala
          115          120          125
Cys Met Asn Leu Ser Met Ala Glu Thr Val Asp Phe Ala Leu Ala Ile
          130          135          140
Val Ile Leu Ile Phe Pro Leu Ser Ala Thr Val Leu Ser Tyr Gly Phe
145          150          155          160
Ile Val Ser Thr Val Leu Gln Ile Pro Ser Ala Thr Gly Gln Arg Lys
          165          170          175
Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val Ile Phe Tyr
          180          185          190
Thr Ala Val Ile Phe Met Tyr Val Arg Pro Arg Ala Ile Ala Ser Phe
          195          200          205
Asn Ser Asn Lys Leu Ile Ser Ala Ile Tyr Ala Val Phe Thr
          210          215          220

```

<210> 2715

<211> 161

<212> PRT

<213> Unknown (K18 (MUSODORECC L14568 293758 B40745) Buck 93)

<400>2715

```

Arg Tyr Val Ala Ile Cys Lys Pro Leu Thr Tyr Lys Val Ile Met Ser
 1           5           10           15
Pro Lys Ile Cys Cys Leu Leu Ile Phe Ser Ser Tyr Leu Met Gly Phe
          20           25           30
Ala Ser Ala Met Ala His Thr Gly Cys Met Ile Arg Leu Ser Phe Cys
          35           40           45
Asp Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu
50           55           60
Pro Leu Ser Cys Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Ser Val
65           70           75           80
Val Val Gly Ser Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser
          85           90           95
Tyr Ala Met Ile Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly
          100          105          110
Trp Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser
          115          120          125
Leu Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala
          130          135          140
Lys Thr Val Gly Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu
145          150          155          160
Val

```

<210> 2716

<211> 222

<212> PRT

<213> Unknown (K4 (MUSODORECD L14569 293760 464303 OLF4 P34983) Ressler-KJ 93)

<400>2716

```

Tyr Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val
 1           5           10           15
Val Ile Pro Lys Met Leu Val Ser Phe Leu Thr Glu Met Asn Ile Ile
      20           25           30
Ser Tyr Ser Glu Cys Met Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly
      35           40           45
Ile Ala Gly Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
      50           55           60
Ala Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile
      65           70           75           80
Tyr Ser Ser Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Ile Cys Ser
      85           90           95
Ser Phe Asn Thr Gly Phe Met Leu Arg Thr Gln Phe Cys Asn Leu Asp
      100          105          110
Val Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala
      115          120          125
Ser Ser Asn Thr Tyr Ile Asn Glu Ile Leu Ile Leu Phe Phe Ala Thr
      130          135          140
Leu Asn Ser Phe Val Pro Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe
      145          150          155          160
Ile Ile Val Thr Ile Leu Ser Ile His Ser Arg Glu Gly Lys Phe Lys
      165          170          175
Ala Phe Ser Thr Cys Ser Thr His Ile Ser Ala Val Ala Ile Phe Tyr
      180          185          190
Gly Ser Gly Ala Phe Thr Tyr Leu Gln Pro Ser Ser Leu Asn Ser Met
      195          200          205
Gly Gln Ala Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val
      210          215          220

```

<210> 2717

<211> 312

<212> PRT

<213> Unknown (olf3 (MUSOR3X OR3 M84005 200154 P23275 A46247) Nef 92)

<400>2717

```

Met Glu Val Asp Ser Asn Ser Ser Ser Gly Thr Phe Ile Leu Met Gly
 1           5           10           15
Val Ser Asp His Pro His Leu Glu Ile Ile Phe Phe Ala Val Ile Leu
      20           25           30
Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu
      35           40           45
Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
      50           55           60
Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln
      65           70           75           80
Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly
      85           90           95
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
      100          105          110
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
      115          120          125
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
      130          135          140
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
      145          150          155          160
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn

```

```
<210> 2718
<211> 309
<212> PRT
<213> Unknown (MMOR23 (X92969))
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gln | Arg | Asn | Asn | Phe | Thr | Glu | Val | Ile | Glu | Phe | Val | Phe | Leu | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Ser | Ser | Phe | Gly | Lys | His | Gln | Ile | Thr | Leu | Phe | Val | Val | Phe | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Ile | Tyr | Ile | Leu | Thr | Leu | Ala | Gly | Asn | Ile | Ile | Ile | Val | Thr | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Thr | His | Ile | Asp | His | His | Leu | His | Thr | Pro | Met | Tyr | Phe | Phe | Leu | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Met | Leu | Ala | Ser | Ser | Glu | Thr | Val | Tyr | Thr | Leu | Val | Ile | Val | Pro | Arg |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Met | Leu | Ser | Ser | Leu | Ile | Phe | Tyr | Asn | Leu | Pro | Ile | Ser | Leu | Ala | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Ala | Thr | Gln | Met | Phe | Phe | Phe | Val | Thr | Leu | Ala | Thr | Asn | Asn | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Leu | Leu | Thr | Ala | Met | Gly | Tyr | Asp | Arg | Tyr | Val | Ala | Ile | Cys | Asn |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Pro | Leu | Arg | Tyr | Thr | Ile | Ile | Met | Ser | Lys | Gly | Met | Cys | Ala | Leu | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Cys | Gly | Ser | Leu | Gly | Thr | Gly | Leu | Val | Met | Ala | Val | Leu | His | Val |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Pro | Ala | Met | Phe | His | Leu | Pro | Phe | Cys | Gly | Thr | Val | Val | Glu | His | Phe |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Phe | Cys | Asp | Ile | Tyr | Pro | Val | Met | Lys | Leu | Ser | Cys | Val | Asp | Thr | Thr |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Val | Asn | Glu | Ile | Ile | Asn | Tyr | Gly | Val | Ser | Ser | Phe | Val | Ile | Leu | Val |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Pro | Ile | Gly | Leu | Ile | Phe | Ile | Ser | Tyr | Val | Leu | Ile | Val | Ser | Ser | Ile |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Leu | Lys | Ile | Val | Ser | Thr | Glu | Gly | Gln | Lys | Lys | Ala | Phe | Ala | Thr | Cys |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Ala | Ser | His | Leu | Thr | Val | Val | Ile | Val | His | Tyr | Gly | Cys | Ala | Ser | Ile |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Ala | Tyr | Leu | Lys | Pro | Lys | Ser | Glu | Ser | Val | Glu | Lys | Asp | Leu | Leu | |
| | | | 260 | | | | | 265 | | | | 270 | | | |
| Leu | Ser | Val | Thr | Tyr | Thr | Ile | Ile | Thr | Pro | Leu | Leu | Asn | Pro | Val | Val |

275 280 285
 Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Cys Arg Ala Val
 290 295 300
 Gly Arg Asn Thr Ser
 305

<210> 2719

<211> 332

<212> PRT

<213> Unknown (GGCOR2GEN)

<400>2719

Met Leu Val Leu Cys Phe Ser Ala Ser Leu Leu Ser Asn Cys Asn Cys
 1 5 10 15
 Val Val Met Met Ala Lys Gly Asn His Ser Ser Ile Thr Glu Phe Val
 20 25 30
 Leu Leu Gly Phe Ser Glu Lys Arg Ala Ile Gln Ala Val Leu Phe Met
 35 40 45
 Gly Phe Leu Leu Ile Tyr Leu Ile Thr Leu Leu Gly Asn Val Gly Met
 50 55 60
 Ile Thr Leu Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
 65 70 75 80
 Phe Leu Ser Ser Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Thr Ile
 85 90 95
 Thr Pro Arg Val Leu Ser Asp Leu Pro Ala Ser Gln Lys Val Ile Ser
 100 105 110
 His Ser Ala Cys Leu Ala Gln Phe Tyr Phe Tyr Ala Val Phe Ala Thr
 115 120 125
 Thr Glu Cys Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
 130 135 140
 Ile Cys Ser Pro Leu Leu Tyr Val Phe Ser Met Ser Ser Arg Val Cys
 145 150 155 160
 Val Leu Leu Val Ala Gly Ser Tyr Leu Val Gly Val Val Asn Ala Thr
 165 170 175
 Ile His Thr Gly Leu Ala Leu Gln Leu Ser Phe Cys Gly Pro Asn Ile
 180 185 190
 Ile Asn His Phe Tyr Cys Asp Gly Pro Pro Leu Tyr Ala Ile Ser Cys
 195 200 205
 Thr Asp Pro Thr Thr Asn Glu Ile Ala Ile Phe Leu Val Val Gly Phe
 210 215 220
 Asn Met Leu Ile Thr Ser Val Thr Ile Phe Ile Ser Tyr Thr Tyr Ile
 225 230 235 240
 Leu Phe Ala Val Leu Arg Met His Thr Ala Ala Gly Lys Arg Lys Thr
 245 250 255
 Phe Ser Thr Cys Ala Ser His Leu Ala Thr Val Thr Leu Phe Tyr Ala
 260 265 270
 Ser Ala Gly Ser Met Tyr Ser Arg Pro Ser Ser Arg His Ser Gln Asp
 275 280 285
 Leu Asp Lys Val Ala Ser Val Phe Tyr Thr Met Val Thr Pro Met Leu
 290 295 300
 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Asp Val Leu
 305 310 315 320
 Gly Lys Val Met Gly Arg Lys Ser Val Ser Asp Lys
 325 330

<210> 2720

<211> 312

<212> PRT

<213> Unknown (GGCOR3GEN)

<400>2720

```

Met Ala Leu Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
 1      5      10      15
Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu
      20      25      30
Val Ile Tyr Thr Thr Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
      35      40      45
Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
      50      55      60
Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
      65      70      75      80
Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly
      85      90      95
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Cys
      100      105      110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
      115      120      125
Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
      130      135      140
Val Lys Gly Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr
      145      150      155      160
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
      165      170      175
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Ser Thr
      180      185      190
Thr Leu Asn Glu Leu Leu Val Ile Ile Phe Gly Ser Leu Phe Val Met
      195      200      205
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
      210      215      220
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
      225      230      235      240
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
      245      250      255
Phe Met Tyr Leu Arg Ser Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
      260      265      270
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
      275      280      285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
      290      295      300
Thr Ala Thr Ser Ile Trp Leu His
      305      310

```

<210> 2721

<211> 312

<212> PRT

<213> Unknown (GGCOR4GEN)

<400>2721

```

Met Ala Glu Gly Asn His Thr Leu Ala Ser Glu Phe Ile Leu Val Gly
 1      5      10      15
Leu Ser Asp His Pro Lys Met Lys Ala Leu Phe Val Val Phe Leu
      20      25      30
Leu Ile Tyr Val Ile Thr Phe Gln Gly Asn Leu Gly Ile Ile Ile Leu
      35      40      45
Ile Gln Gly Asp Pro Arg Leu His Thr Ser Met Tyr Phe Phe Leu Ser
      50      55      60
Ser Leu Ser Val Val Asp Ile Cys Phe Ser Ser Val Ile Ala Pro Arg
      65      70      75      80
Thr Leu Val Asn Phe Leu Ser Glu Arg Arg Thr Ile Ser Phe Thr Gly
      85      90      95
Cys Thr Gly Gln Thr Phe Phe Tyr Ile Val Phe Val Thr Thr Glu Cys
      100      105      110

```


Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125
 Pro Leu Leu Tyr Ser Thr Ile Met Thr Arg Arg Gln Cys Met Gln Leu
 130 135 140
 Val Val Gly Ser Tyr Ile Gly Gly Ile Leu Asn Ala Ile Ile Gln Thr
 145 150 155 160
 Thr Phe Ile Ile Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His
 165 170 175
 Phe Phe Cys Asp Val Pro Pro Leu Leu Ala Leu Ser Leu Ala Ser Thr
 180 185 190
 Tyr Ile Ser Glu Met Ile Leu Phe Ser Leu Ala Gly Ile Ile Glu Leu
 195 200 205
 Ser Thr Val Thr Ser Ile Leu Val Ser Tyr Ile Phe Ile Ser Cys Ala
 210 215 220
 Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Thr Ala Val Thr Leu Leu Tyr Gly Thr Thr Ile
 245 250 255
 Phe Thr Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Leu Asn Thr Asp Lys
 260 265 270
 Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gly Ala Leu Ser Arg Val
 290 295 300
 Val Glu Arg Ile Thr Val Arg Val
 305 310

<210> 2722

<211> 318

<212> PRT

<213> Unknown (GGCOR1)

<400>2722

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
 1 5 10 15
 Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
 20 25 30
 Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
 35 40 45
 Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
 50 55 60
 Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
 65 70 75 80
 Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly
 85 90 95
 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Thr Glu Ser
 100 105 110
 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
 115 120 125
 Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
 130 135 140
 Val Glu Ser Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr
 145 150 155 160
 Ser Gly Leu Leu Lys Leu Ser Phe Cys Tyr Ser Asn Val Val Asn His
 165 170 175
 Phe Phe Cys Asp Ile Ser Pro Leu Phe Gln Ile Ser Ser Ser Ser Ile
 180 185 190
 Ala Ile Ser Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met
 195 200 205
 Ser Ser Ile Ile Ile Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
 210 215 220

Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
 245 250 255
 Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
 260 265 270
 Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
 290 295 300
 Thr Ala Thr Thr Phe Gly Phe Ile Asp Ser Lys Ala Val Gln
 305 310 315

<210> 2723

<211> 312

<212> PRT

<213> Unknown (GGCOR2)

<400>2723

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
 1 5 10 15
 Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu
 20 25 30
 Val Ile Tyr Thr Thr Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
 35 40 45
 Ile Gly Met Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
 50 55 60
 Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
 65 70 75 80
 Met Leu Ala Thr Phe Leu Glu Glu Arg Arg Thr Ile Ser Tyr Val Gly
 85 90 95
 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Trp
 100 105 110
 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
 115 120 125
 Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
 130 135 140
 Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr
 145 150 155 160
 Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
 165 170 175
 Phe Phe Cys Asp Asn Arg Pro Leu Phe Gln Ile Ser Ser Ser Ser Thr
 180 185 190
 Thr Leu Asn Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met
 195 200 205
 Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
 210 215 220
 Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
 245 250 255
 Phe Met Tyr Leu Arg Ser Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
 260 265 270
 Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
 275 280 285
 Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
 290 295 300
 Thr Ala Thr Ser Val Trp Leu His
 305 310

<210> 2724

<211> 318

<212> PRT

<213> Unknown (GGCOR3)

<400>2724

```

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
1           5           10          15
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
20          25          30
Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Arg Leu
35          40          45
Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
50          55          60
Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
65          70          75          80
Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly
85          90          95
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Cys
100         105         110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
115         120         125
Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu
130         135         140
Val Glu Ser Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr
145         150         155         160
Cys Gly Leu Leu Lys Leu Ser Phe Cys Tyr Ser Asn Val Val Asn His
165         170         175
Phe Phe Cys Asp Ile Ser Pro Leu Phe Gln Ile Ser Ser Ser Ile
180         185         190
Ala Ile Ser Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met
195         200         205
Ser Ser Ile Ile Ile Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
210         215         220
Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
225         230         235         240
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
245         250         255
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
260         265         270
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
275         280         285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
290         295         300
Thr Ala Thr Thr Phe Gly Phe Ile Asp Ser Lys Ala Val Gln
305         310         315

```

<210> 2725

<211> 312

<212> PRT

<213> Unknown (GGCOR4)

<400>2725

```

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
1           5           10          15
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
20          25          30
Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
35          40          45
Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
50          55          60
Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys

```

```

65          70          75          80
Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Ile Gly
          85          90          95
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Thr Glu Ser
          100          105          110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
          115          120          125
Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
          130          135          140
Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr
145          150          155          160
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
          165          170          175
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Ser Thr
          180          185          190
Thr Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Leu Phe Ala Met
          195          200          205
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
210          215          220
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
225          230          235          240
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
          245          250          255
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
          260          265          270
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
          275          280          285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Val
290          295          300
Ile Ala Thr Asn Val Trp Ile His
305          310

```

<210> 2726

<211> 312

<212> PRT

<213> Unknown (GGCOR5)

<400>2726

```

Met Ala Leu Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
1          5          10          15
Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu
          20          25          30
Ala Ile Tyr Thr Ile Thr Leu Leu Ala Asn Leu Gly Leu Ile Ala Leu
          35          40          45
Ile Ser Val Asp Phe His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
          50          55          60
Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
65          70          75          80
Met Leu Ala Thr Phe Leu Glu Glu Arg Arg Thr Ile Ser Tyr Val Gly
          85          90          95
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Ser Ser Glu Cys
          100          105          110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
          115          120          125
Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu
          130          135          140
Val Glu Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr
145          150          155          160
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
          165          170          175
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Ser Thr

```

```

      180      185      190
Thr Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Trp Phe Ala Met
      195      200      205
Ser Ser Ile Ile Thr Thr Pro Ile Ser Tyr Val Phe Ile Ile Leu Thr
      210      215      220
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
      225      230      235      240
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
      245      250      255
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
      260      265      270
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
      275      280      285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Val
      290      295      300
Ile Ala Thr Asn Val Trp Ile His
      305      310

```

<210> 2727

<211> 312

<212> PRT

<213> Unknown (GGCOR6)

<400>2727

```

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
1      5      10      15
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
      20      25      30
Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
      35      40      45
Ile Ser Ile Asp Leu Gln Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
      50      55      60
Asn Leu Ser Phe Thr Asp Ala Val Tyr Ser Thr Val Ile Thr Pro Lys
      65      70      75      80
Met Leu Ala Thr Phe Leu Glu Glu Thr Lys Thr Ile Ser Tyr Val Gly
      85      90      95
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Arg Glu Cys
      100      105      110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys
      115      120      125
Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu
      130      135      140
Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Phe Leu Val His Thr
      145      150      155      160
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
      165      170      175
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Thr
      180      185      190
Ala Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Leu Phe Val Met
      195      200      205
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
      210      215      220
Val Val Arg Ile Arg Ser Lys Glu Arg Lys Tyr Lys Ala Phe Ser Thr
      225      230      235      240
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Ile Val
      245      250      255
Phe Met Tyr Phe Gln Pro Ala Asn Asn Phe Ser Leu Asp Lys Asp Lys
      260      265      270
Ile Met Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
      275      280      285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu His Arg Ala

```

290 295 300
 Ile Ala Thr Ala Val Leu Phe His
 305 310

<210> 2728
 <211> 162
 <212> PRT
 <213> Unknown (XLORXR1)

<400>2728
 Val Ala Val Cys His Pro Leu Leu Tyr Val Phe His Met Ser Gln Lys
 1 5 10 15
 His Cys Thr Phe Phe Val Ser Ala Ala Trp Ile Ile Gly Phe Leu Asp
 20 25 30
 Pro Thr Ser Tyr Val Val Leu Ile Ser Lys Phe Ser Phe Cys Thr Ser
 35 40 45
 Asn Ile Ile Asp His Phe Phe Cys Asp Leu Ala Pro Leu Leu Lys Leu
 50 55 60
 Ser Cys Ser Asp Thr Phe Gln Ile Glu Val Leu Asn Tyr Val Glu Ser
 65 70 75 80
 Ala Leu Val Thr Leu Asn Ser Phe Val Leu Thr Val Ile Ser Tyr Ile
 85 90 95
 Phe Thr Ile Ser Ala Ile Leu Asn Ile Lys Ser Ala Glu Gly Arg His
 100 105 110
 Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
 115 120 125
 Tyr Ser Thr Ile Ile Ser Leu Tyr Ile Arg Pro Ile Ser Thr Tyr Ala
 130 135 140
 Pro Lys Gln Asp Gln Phe Phe Ala Leu Leu Tyr Ile Val Leu Ile Pro
 145 150 155 160
 Leu Leu

<210> 2729
 <211> 161
 <212> PRT
 <213> Unknown (XLORXR2)

<400>2729
 Val Ala Ile Cys Tyr Pro Leu His Tyr Ala Leu Arg Met Ser Leu Lys
 1 5 10 15
 His Cys Ala Lys Ile Ile Val Gly Val Trp Val Ala Gly Phe Leu Ala
 20 25 30
 Pro Val Ile His Thr Val Leu Met Thr Asn Leu Ser Phe Cys Ser Ser
 35 40 45
 Asn His Ile Asn His Phe Leu Cys Asp Leu Thr Pro Val Leu Lys Ile
 50 55 60
 Ser Cys Ser Asp Thr Ser Leu Ile Glu Met Ile Thr Tyr Ile Asp Gly
 65 70 75 80
 Val Ile Val Ala Phe Ser Thr Phe Thr Ile Thr Ser Val Ser Tyr Val
 85 90 95
 Phe Ile Leu Phe Lys Ile Leu Lys Ile His Ser Ser Gln Gly Lys Lys
 100 105 110
 Lys Ala Leu Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
 115 120 125
 Tyr Gly Ser Ile Ile Cys Leu Tyr Met Arg Pro Thr Lys Ser Ile Ser
 130 135 140
 Pro Asn Gln Asp Val Phe Ala Leu Leu Tyr Ala Val Leu Val Pro Met
 145 150 155 160
 Leu

<210> 2730
 <211> 155
 <212> PRT
 <213> Unknown (XLORXR3)

<400>2730
 Val Ala Ile Cys Met Pro Met Leu Tyr Ser Leu Ile Met Lys Lys Ser
 1 5 10 15
 Ile Cys Ala Leu Leu Ala Ser Val Ser Trp Phe Met Gly Ala Met Asp
 20 25 30
 Ser Phe Met Phe Trp Tyr Leu Val Ser Asn Ser Ser Phe Cys Asp His
 35 40 45
 Gln Glu Ile Asn His Phe Phe Cys Asp Leu Lys Thr Leu Met Lys Leu
 50 55 60
 Ser Cys Arg Gly Ala Glu Thr Ile Lys Ile Val Ile Ile Val Ala Ser
 65 70 75 80
 Ala Val Leu Gly Phe Leu Pro Phe Cys Leu Ile Leu Ile Ser Tyr Ala
 85 90 95
 Asn Ile Ile Ser Ser Val Ser Lys Ile Arg Thr Ala Ala Gly Lys Leu
 100 105 110
 Lys Ile Phe Ser Ser Cys Gly Ser His Leu Thr Val Val Leu Leu Phe
 115 120 125
 Cys Gly Thr Cys Leu Ser Leu Tyr Met Lys Pro Asp Ser Gly Asn Ser
 130 135 140
 Gln Glu Asn Glu Glu Leu Leu Ser Leu Leu Tyr
 145 150 155

<210> 2731
 <211> 162
 <212> PRT
 <213> Unknown (XLORXR5)

<400>2731
 Val Ala Ile Cys Gln Pro Leu Leu Tyr Ala Val Ile Met Asn Arg Lys
 1 5 10 15
 Val Val Ile Ile Phe Val Val Gly Val Tyr Leu Ser Gly Ile Phe Thr
 20 25 30
 Ala Ser Ile His Thr Ala Cys Thr Leu Thr Leu Ser Phe Cys Gly Pro
 35 40 45
 Asn Thr Ile Asn His Phe Tyr Cys Asp Ile Pro Pro Leu Met Glu Leu
 50 55 60
 Ser Cys Ser Asp Thr Tyr Ile His Lys Thr Val Ile Phe Val Val Val
 65 70 75 80
 Phe Cys Leu Gly Leu Phe Asn Val Ala Val Ile Leu Ala Ser Tyr Ser
 85 90 95
 Tyr Ile Phe Phe Thr Ile Ile His Ile Gln Ser Ser Cys Gly Arg His
 100 105 110
 Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Cys Val Ser Leu Phe
 115 120 125
 Tyr Gly Thr Val Phe Phe Met Tyr Leu Arg Pro Ala Ser Lys Tyr Ser
 130 135 140
 Val Ser Gln Asp Lys Val Val Ser Val Phe Tyr Thr Met Val Ile Pro
 145 150 155 160
 Met Met

<210> 2732
 <211> 163
 <212> PRT
 <213> Unknown (XLORXR9)

<400>2732

```

Leu Ala Ile Cys Phe Pro Leu Asn Tyr Cys Leu Ile Met Ser Gln Ser
 1              5              10              15
Leu Arg Cys Arg Leu Val Val Val Cys Trp Ala Cys Gly Leu Val Asn
              20              25              30
Ser Leu Val Gln Ala Phe Ser Ile Ser His Leu Asp Phe Cys Gly Pro
 35              40              45
Asn Val Val Asp His Phe Phe Cys Asp Val Thr Pro Leu Phe Lys Leu
 50              55              60
Ser Cys Ser Asp Thr Arg Val Ser Glu Thr Ile Phe Leu Leu Val Val
 65              70              75              80
Ala Val Ala Gly Met Gly Pro Leu Thr Phe Ile Leu Val Thr Tyr Gly
              85              90              95
His Ile Ile Leu Ala Ile Thr Arg Ile Thr Ser Ser His Gly Arg Tyr
              100              105              110
Lys Thr Phe Ser Thr Cys Ala Ser His Phe Thr Val Val Ala Leu Tyr
              115              120              125
Tyr Gly Ser Gly Ile Phe Ser Tyr Ile Trp Pro Thr Ser Thr Tyr Ala
              130              135              140
Met Asn Lys Asp Val Lys Val Val Ala Val Leu Tyr Thr Val Met Thr
 145              150              155              160
Pro Met Leu

```

<210> 2733

<211> 159

<212> PRT

<213> Unknown (XLORXR13)

<400>2733

```

Val Ala Ile Ser Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys
 1              5              10              15
Val Cys Ala Val Leu Gly Val Ala Met Trp Thr Ala Gly Thr Val His
              20              25              30
Ser Ile Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro
 35              40              45
Asp Glu Ile Asp Asn Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu
 50              55              60
Ala Cys Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser
 65              70              75              80
Gly Met Ile Ser Met Val Cys Phe Val Ile Val Val Ser Tyr Ala
              85              90              95
Val Ile Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys
              100              105              110
Ala Leu Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu
              115              120              125
Gly His Cys Ile Phe Ile Tyr Ser Arg Pro Ser Ile Ser Leu Pro Glu
              130              135              140
Asp Lys Ile Val Ser Ala Phe Phe Thr Ala Val Thr Pro Leu Leu
 145              150              155

```

<210> 2734

<211> 162

<212> PRT

<213> Unknown (XLORXR17)

<400>2734

```

Asn Ala Ile Cys Asn Pro Leu Leu Tyr Asn Thr Ile Met Asn Lys Arg
 1              5              10              15
Thr Cys Val Ile Leu Ile Val Gly Ser Trp Leu Ile Ala Ser Ile Asn

```



```

      20      25      30
Ser Leu Ile His Thr Ile Leu Thr Phe Met Leu Pro Phe Cys Gly Ser
      35      40      45
Asn Ala Ile Asp Ser Phe Phe Cys Asp Met Pro Pro Leu Leu Lys Leu
      50      55      60
Ala Cys Thr Asp Thr Leu Val Asn Gln Ile Val Ile Phe Val Thr Gly
      65      70      75      80
Ser Cys Ile Ile Ala Gly Pro Phe Met Leu Thr Val Phe Ser Tyr Val
      85      90      95
Gln Ile Ile Ser Thr Ile Val Ser Ile Arg Ser Ser Ser Arg Lys Lys
      100      105      110
Lys Ala Phe Ser Thr Cys Thr Ser His Ile Thr Ala Val Val Ile Phe
      115      120      125
Tyr Val Pro Ser Ile Cys Ile Tyr Phe Arg Pro Lys Ser Asn Gln Ala
      130      135      140
Met Ile Gln Asp Lys Met Ala Thr Val Ile Cys Ala Val Ile Thr Pro
      145      150      155      160
Leu Leu

```

<210> 2735

<211> 223

<212> PRT

<213> Unknown (XLORXR42)

<400>2735

```

Cys Asn Leu Ser Ser Leu Asp Ile Ala Tyr Thr Ser Val Thr Ala Pro
1      5      10      15
Lys Leu Ile His Ile Phe Ala Val Asn Asn His Arg Ile Ser Phe Trp
      20      25      30
Gln Cys Ile Ala Gln Leu Tyr Phe Phe Ile Ala Phe Gly Ser Thr Glu
      35      40      45
Tyr Leu Leu Leu Thr Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys
      50      55      60
Lys Pro Leu His Tyr Arg Val Val Met Ser Pro Met Leu Cys Arg Ala
      65      70      75      80
Gly Ala Ala Gly Thr Trp Ile Gly Gly Leu Leu Ala Ser Ile Pro Thr
      85      90      95
Ala Thr Ala Ala Ala Asn Ile Tyr Tyr Cys Ser Asn Asn Ile Ile Ile
      100      105      110
Asn His Phe Cys Asp Met Met Ala Leu Val Lys Leu Ala Cys Ser
      115      120      125
Asp Thr Thr Met Thr Arg Ala Val Ile Phe Val Glu Gly Met Leu Ile
      130      135      140
Leu Met Thr Cys Phe Leu Leu Thr Val Ile Ser Tyr Ile Cys Ile Leu
      145      150      155      160
Ser Thr Ile Val Arg Ile His Ser Ser Gly Gly Lys Phe Lys Ala Phe
      165      170      175
Ser Thr Cys Ala Ser His Leu Ser Val Val Ser Ile Phe Tyr Val Leu
      180      185      190
Ile Phe Tyr Leu Tyr Leu Lys Pro Lys Ser Glu Ile Ser Leu Ser Gln
      195      200      205
Gly Lys Leu Leu Thr Val Leu Tyr Val Tyr Phe Ile Pro Met Phe
      210      215      220

```

<210> 2736

<211> 217

<212> PRT

<213> Unknown (XLORXR46)

<400>2736

```

Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp
1      5      10      15
Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe
20      25      30
Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met
35      40      45
Ala Ala Asp Arg Tyr Val Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala
50      55      60
Ile Ile Thr Lys Lys Leu Thr Ala Ile Phe Cys Ser Cys Phe Trp Val
65      70      75      80
Leu Ser Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu
85      90      95
Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser
100      105      110
Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val
115      120      125
Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile
130      135      140
Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His
145      150      155      160
Ser Asp Asn Trp Gln Lys Leu Phe Tyr Thr Cys Thr Thr His Leu Leu
165      170      175
Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Val Tyr Leu Ala Asn
180      185      190
Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr
195      200      205
Met Tyr Thr Phe Leu Pro His Leu Ala
210      215

```

<210> 2737

<211> 217

<212> PRT

<213> Unknown (XLORXR106)

<400>2737

```

Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp
1      5      10      15
Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe
20      25      30
Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met
35      40      45
Ala Ala Asp Arg Tyr Ile Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala
50      55      60
Ile Ile Thr Lys Lys Leu Thr Thr Ile Phe Cys Ser Cys Phe Trp Val
65      70      75      80
Leu Ser Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu
85      90      95
Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser
100      105      110
Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val
115      120      125
Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile
130      135      140
Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His
145      150      155      160
Ser Asp Asn Trp Gln Lys Leu Phe Tyr Thr Cys Thr Thr His Leu Leu
165      170      175
Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Met Tyr Leu Ala Asn
180      185      190
Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr
195      200      205

```

Met Tyr Thr Phe Leu Pro His Leu Ala
210 215

<210> 2738

<211> 217

<212> PRT

<213> Unknown (XLORXR116)

<400>2738

Leu Leu Phe Asp Thr Ile Thr Leu Pro Lys Ile Ile Ala Lys Tyr Trp
1 5 10 15
Phe Gly Ala Arg Ser Ile Ser Phe Tyr Gly Cys Ile Phe Gln Leu Phe
20 25 30
Cys Val His Ser Leu Gly Ser Leu Asp Ser Phe Ile Ile Met Leu Met
35 40 45
Ala Ile Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr His Ser
50 55 60
Ile Ile Ser Asn Lys Leu Val Thr Leu Leu Cys Tyr Phe Phe Trp Val
65 70 75 80
Leu Ala Ala Leu Ile Gly Ser Ile Val Ala Val Ile Ala Gly Gln Leu
85 90 95
Pro Tyr Cys Gly Pro Asn Arg Val Arg Asn Cys Phe Cys Val Asn Ser
100 105 110
Ala Val Thr Val Leu Ala Cys Val Asp Val Thr Leu Ala Arg Arg Thr
115 120 125
Val Phe Thr Leu Ala Met Cys Val Leu Leu Leu Pro Leu Ala Phe Ile
130 135 140
Ile Leu Ser Tyr Ile Leu Ile Ile Arg Val Ile His Ser Ser Thr Asn
145 150 155 160
Asn Glu Asn Ser Trp Lys Ala Phe Tyr Thr Cys Thr Thr His Leu Met
165 170 175
Val Ile Gly Leu Tyr Tyr Ile Pro Arg Val Phe Val Tyr Ser Thr Ser
180 185 190
Gln Ile Pro Leu Ile Leu Asp Val Asp Ile Asn Val Leu Leu Leu Cys
195 200 205
Leu Tyr Thr Phe Val Pro His Leu Ala
210 215

<210> 2739

<211> 217

<212> PRT

<213> Unknown (XLORXR117)

<400>2739

Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp
1 5 10 15
Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe
20 25 30
Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met
35 40 45
Ala Ala Asp Arg Tyr Ile Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala
50 55 60
Ile Ile Thr Lys Lys Leu Thr Thr Ile Phe Cys Ser Cys Phe Trp Val
65 70 75 80
Leu Gly Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu
85 90 95
Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser
100 105 110
Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val
115 120 125
Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile

```

      130              135              140
Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His
145              150              155              160
Ser Asp Asn Trp Gln Lys Pro Phe Tyr Thr Cys Thr Thr His Leu Leu
      165              170              175
Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Met Tyr Leu Ala Asn
      180              185              190
Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr
      195              200              205
Met Tyr Thr Phe Leu Pro His Leu Ala
      210              215

```

<210> 2740

<211> 222

<212> PRT

<213> Unknown (XLORXR171)

<400>2740

```

Gln Gln Leu Ser Val Cys Asp Leu Leu Gln Thr Ala Cys Thr Val Pro
 1              5              10              15
Leu Leu Leu Trp Thr Ile Ile Asn Asp Gly Thr Thr Ile Ser Val Gly
      20              25              30
Gly Cys Ile Thr Gln Phe Tyr Phe Phe Asn Ala Ser Glu Ser Val Glu
      35              40              45
Cys Leu Leu Leu Thr Val Met Ser Phe Asp Arg Tyr Leu Ala Ile Cys
      50              55              60
Asn Pro Leu Arg Tyr Thr Ser Leu Met Asn Pro Lys Leu Cys Val Lys
      65              70              75              80
Leu Thr Leu Ile Pro Trp Leu Leu Gly Phe Ser Ile Ile Leu Ile Thr
      85              90              95
Ala Asn Ala Ile Ala Thr Leu Gln Phe Cys Asn Gln Asn Thr Ile Asn
      100              105              110
His Tyr Phe Cys Asp Tyr Phe Pro Leu Leu Glu Leu Ser Cys Met Asp
      115              120              125
Thr Phe Phe Val Gln Thr Glu Ala Ile Leu Gln Ala Val Pro Val Val
      130              135              140
Phe Ile Pro Ile Ile Leu Ile Ile Ser Tyr Val Phe Ile Ile His
      145              150              155              160
Thr Leu Leu Lys Ile Val Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser
      165              170              175
Thr Cys Ser Ser His Leu Ile Val Val Phe Leu Phe Tyr Gly Ser Leu
      180              185              190
Ile Gly Ile Tyr Val Val Pro Ser Arg Lys Gln Ser Pro Thr Ile Ser
      195              200              205
Lys Val Phe Ser Leu Leu Tyr Thr Val Val Thr Pro Leu Leu
      210              215              220

```

<210> 2741

<211> 220

<212> PRT

<213> Unknown (XLORXR181)

<400>2741

```

Gln Gln Leu Ser Leu Ser Asp Leu Leu Gly Ser Thr Asn Ile Val Pro
 1              5              10              15
Thr Leu Leu Glu Thr Ile Ile Leu Gly Arg Ala Ser Ile Ser Leu Val
      20              25              30
Asp Cys Ile Thr Gln Phe Asn Val Phe Gly Gly Ser Glu Thr Phe Val
      35              40              45
Gly Phe Leu Leu Ala Val Met Ser Asn Asp Arg Tyr Val Ala Ile Cys
      50              55              60

```

```

Ile Pro Leu Arg Tyr Thr Ser Ile Thr Ser Tyr Asn Ile Cys Asn Lys
65          70          75          80
Leu Ile Leu Val Ser Trp Leu Leu Gly Leu Gly Ala Ile Leu Ile Thr
      85          90          95
Ala Asn Leu Ile Ala Thr Leu Tyr Phe Cys Asp Gln Asn Ile Ile Asn
      100         105         110
His Phe Phe Cys Asp Phe Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp
      115         120         125
Thr Phe Ile Val Gln Leu Glu Val Ile Leu Leu Ser Ile Pro Val Ile
      130         135         140
Ile Tyr Pro Phe Ile Leu Ile Ile Val Ser Tyr Ile Cys Ile Ala His
145          150         155         160
Ala Ile Leu Lys Ile Val Ser Asn Thr Gly Arg Gln Lys Ala Phe Ser
      165         170         175
Thr Cys Ser Ser His Leu Ala Val Val Ser Ile Phe Tyr Gly Ala Leu
      180         185         190
Thr Ala Val Tyr Val Ala Pro Pro Arg Lys Glu Ser Gln Thr Leu Ser
      195         200         205
Lys Val Phe Ser Leu Leu Tyr Thr Val Met Ile Pro
      210         215         220

```

<210> 2742
 <211> 220
 <212> PRT
 <213> Unknown (XLOR185)

<400>2742

```

Ser Gln Leu Ser Thr Ser Asp Ile Val Ile Ser Thr Thr Val Cys Pro
1          5          10          15
Asn Leu Leu Tyr Ile Thr Trp Asn Glu Gly Ala Tyr Ile Ser Ile Thr
      20          25          30
Gly Cys Ile Trp Gln Phe Asn Met Phe Ser Val Ser Ser Val Thr Glu
      35          40          45
Cys Phe Leu Leu Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Cys
      50          55          60
Lys Pro Leu His Tyr Ala Ser Ile Met Thr Trp Arg Ser Cys Ile Phe
65          70          75          80
Leu Val Met Ser Cys Trp Ser Leu Gly Phe Leu Leu Ser Met Ile Val
      85          90          95
Thr Val Met Ile His Tyr Leu His Phe Cys Gly Pro Tyr Thr Ile Asp
      100         105         110
His Leu Phe Cys Asp Tyr Thr Pro Leu Met Gln Leu Ser Cys Ser Asp
      115         120         125
Thr Thr Ile Leu Lys Met Thr Val Phe Leu Ile Ala Thr Pro Gly Thr
      130         135         140
Val Leu Gln Pro Phe Phe Ile Ile Ala Thr Tyr Ile Asn Ile Ile Leu
145          150         155         160
Asn Ile Leu Arg Ile Ser Ser Ser Ser Lys Arg Gln Lys Ala Phe Ser
      165         170         175
Thr Cys Ser Ser His Leu Ser Val Val Cys Leu Tyr Tyr Gly Thr Leu
      180         185         190
Ile Ala Thr Tyr Ala Thr Pro Thr Asp Gly Arg Leu Ser Thr Arg Asn
      195         200         205
Lys Leu Leu Ser Leu Ile Tyr Thr Val Gly Thr Pro
      210         215         220

```

<210> 2743
 <211> 222
 <212> PRT
 <213> Unknown (XLORXR206)

<400>2743

Gly Asn Leu Ser Phe Val Asp Ile Ser Phe Ile Ser Val Thr Val Pro
 1 5 10 15
 Leu Met Val Ala His Leu Leu Thr Asp Lys Lys Ser Ile Ser Phe Thr
 20 25 30
 Gly Cys Met Thr Gln Leu Phe Phe Phe Ile Trp Ile Ala Val Leu Glu
 35 40 45
 Cys Leu Ile Leu Thr Ile Met Ala Tyr Asp Arg Leu Val Ala Ile Thr
 50 55 60
 Asn Pro Leu Arg Tyr Leu Ser Ile Leu Asp Arg Lys Thr Cys Trp Ser
 65 70 75 80
 Leu Ile Thr Phe Ser Trp Ile Leu Ser Phe Leu His Ser Leu Leu Tyr
 85 90 95
 Ala Ser Thr Ile Ser Ser Leu Asp Tyr Cys Gly Leu Asn Lys Val Asn
 100 105 110
 Glu His Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asn
 115 120 125
 Pro Ala Ser Leu Glu Leu Leu Val Tyr Thr Glu Gly Ser Val Met Ala
 130 135 140
 Met Ser Pro Phe Val Leu Ile Met Val Ser Tyr Leu Arg Ile Ile Lys
 145 150 155 160
 Thr Ile Leu Ser Ile His Ser Ser Ser Gly Arg Tyr Arg Ala Phe Ser
 165 170 175
 Thr Cys Ser Ser His Leu Ile Ser Val Gly Leu Phe Phe Val Thr Ile
 180 185 190
 Phe Val Ser Tyr Leu Gln Pro Ala Ser Ala Gly Ala Val Glu Thr Asn
 195 200 205
 Arg Pro Ile Ala Leu Val Tyr Ser Ile Leu Thr Pro Leu Pro
 210 215 220

<210> 2744

<211> 222

<212> PRT

<213> Unknown (XLORXR214)

<400>2744

Ser Asn Met Ser Phe Leu Glu Ile Arg Tyr Ile Ser Val Thr Leu Pro
 1 5 10 15
 Asn Leu Leu Val Asn Thr Leu Ser Lys Asp Met Ser Ile Ser Leu Ala
 20 25 30
 Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Ser Leu Met Cys Thr Glu
 35 40 45
 Cys Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Ile Ala Val Cys
 50 55 60
 His Pro Leu His Tyr Val Thr Ile Val Ser Asn Lys Leu Cys Ile Gln
 65 70 75 80
 Leu Ala Ala Ala Ser Trp Ile Ala Gly Phe Thr Val Ser Val Ile Lys
 85 90 95
 Val Tyr Phe Ile Ser Arg Leu Ser Phe Cys Gly Pro Asn Ile Ile Asn
 100 105 110
 His Phe Phe Cys Asp Ile Ser Pro Val Leu Asn Leu Ala Cys Val Asp
 115 120 125
 Met Ser Leu Ala Glu Phe Val Asp Phe Val Leu Ala Leu Val Ile Leu
 130 135 140
 Leu Thr Pro Leu Phe Val Thr Val Ala Ser Tyr Leu Cys Ile Ile Phe
 145 150 155 160
 Thr Ile Leu Lys Ile Pro Thr Asn Thr Gly Arg Gln Lys Ala Phe Ser
 165 170 175
 Thr Cys Ala Ser His Leu Thr Val Val Thr Ile Phe Phe Ser Thr Thr
 180 185 190
 Leu Phe Met Tyr Ala Arg Pro Lys Lys Ala Lys Ser Leu Asp Tyr Phe

195 200 205
 Lys Ile Leu Ser Leu Leu Tyr Ala Val Phe Thr Pro Met Leu
 210 215 220

<210> 2745

<211> 312

<212> PRT

<213> Unknown (HOR5beta3)

<400>2745

Met Trp Pro Asn Ile Thr Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
 1 5 10 15
 Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Val
 20 25 30
 Tyr Val Cys Ile Leu Leu Gly Asn Gly Met Leu Leu Tyr Leu Ile Lys
 35 40 45
 His Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Thr Met Leu
 50 55 60
 Ala Gly Thr Asp Leu Met Val Thr Leu Thr Thr Met Pro Thr Val Met
 65 70 75 80
 Gly Ile Leu Trp Val Asn His Arg Glu Ile Ser Ser Val Gly Cys Phe
 85 90 95
 Leu Gln Ala Tyr Phe Ile His Ser Leu Ser Val Val Glu Ser Gly Ser
 100 105 110
 Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg Asn Pro Leu
 115 120 125
 Arg Tyr Ala Ser Ile Phe Thr Asn Thr Arg Val Ile Ala Leu Gly Val
 130 135 140
 Gly Val Phe Leu Arg Gly Phe Val Ser Ile Leu Pro Val Ile Leu Arg
 145 150 155 160
 Leu Phe Ser Phe Ser Tyr Cys Lys Ser His Val Ile Thr Arg Ala Phe
 165 170 175
 Cys Leu His Gln Glu Ile Met Arg Leu Ala Cys Ala Asp Ile Thr Phe
 180 185 190
 Asn Arg Leu Tyr Pro Val Ile Leu Ile Ser Leu Thr Ile Phe Leu Asp
 195 200 205
 Ser Leu Ile Ile Leu Phe Ser Tyr Ile Leu Ile Leu Asn Thr Val Ile
 210 215 220
 Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Ile
 225 230 235 240
 Ser His Ile Ser Cys Val Leu Ile Phe Tyr Val Thr Val Met Gly Leu
 245 250 255
 Thr Phe Ile Tyr Arg Phe Gly Lys Asn Val Pro Glu Val Val His Ile
 260 265 270
 Ile Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Val
 275 280 285
 Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Tyr Gly Ile Ile Arg Leu
 290 295 300
 Leu Ser Lys His Arg Phe Ser Arg
 305 310

<210> 2746

<211> 310

<212> PRT

<213> Unknown (HOR5beta2 (translated via ORDEAL))

<220>

<221> VARIANT

<222> (1)...(310)

<223> Xaa = Any Amino Acid

<400>2746

```

Thr His Asn Ala Ala Pro Phe Leu Leu Pro Gly Phe Ser Val Leu Glu
 1          5          10          15
Ala Thr Tyr His Ser Ile Ser Ile Pro Phe Phe Ala Val Tyr Val Cys
          20          25          30
Val Leu Leu Gly Asn Gly Lys Leu Leu Tyr Leu Ile Lys His Asp His
          35          40          45
Ser Leu His Glu Pro Met Tyr Cys Phe Leu Ala Thr Leu Arg Gln Asp
          50          55          60
Leu Met Val Lys Leu Thr Met Met Pro Thr Val Met Gly Val Leu Trp
65          70          75          80
Met Asn His Lys Glu Val Ile His Gly Ala Cys Phe Leu Gln Val Tyr
          85          90          95
Ile Ile His Ser His Tyr Pro Leu Ala Glu Ser Gly Ile Leu Leu Ser
          100          105          110
Met Ala Tyr Asp Arg Phe Ile Ile His Met Leu Leu Arg Tyr Asn
          115          120          125
Ser Ile Ser Thr Lys Ser Trp Val Lys Ile Glu Leu Trp Leu Phe Met
          130          135          140
Arg Asp Phe Leu Ser Leu Val Pro Pro Ile Leu Pro Leu His Cys Phe
145          150          155          160
Pro Tyr Cys His Ser His Val Leu Phe His Thr Phe Phe Leu His Gln
          165          170          175
Asp Val Leu Lys Leu Ala Cys Ala Asp Ile Thr Phe Asn His Leu Tyr
          180          185          190
Pro Ala Ile Leu Val Ala Leu Ile Phe Phe Leu Asp Ala Leu Ile Ile
          195          200          205
Val Phe Ser Tyr Ile Leu Ile Leu Lys Thr Val Ile Gly Ile Ala Ser
          210          215          220
Arg Lys Glu Gln Ala Lys Ala Leu Asn Met Cys Val Ser His Ile Ser
225          230          235          240
Cys Val Leu Val Phe His Ile Thr Val Ile Ser Glu Thr Phe Ile His
          245          250          255
Arg Phe Gly Lys His Ala Pro His Val Val His Ile Thr Val Ser Xaa
          260          265          270
Xaa Leu Ile Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr Ser Ile
          275          280          285
Lys Pro Ser Arg Ser Lys Glu Ala Leu Xaa Arg Leu Phe Ser Gly His
          290          295          300
Arg Met Ala Xaa Ala Leu
305          310

```

<210> 2747

<211> 310

<212> PRT

<213> Unknown (HOR5beta1)

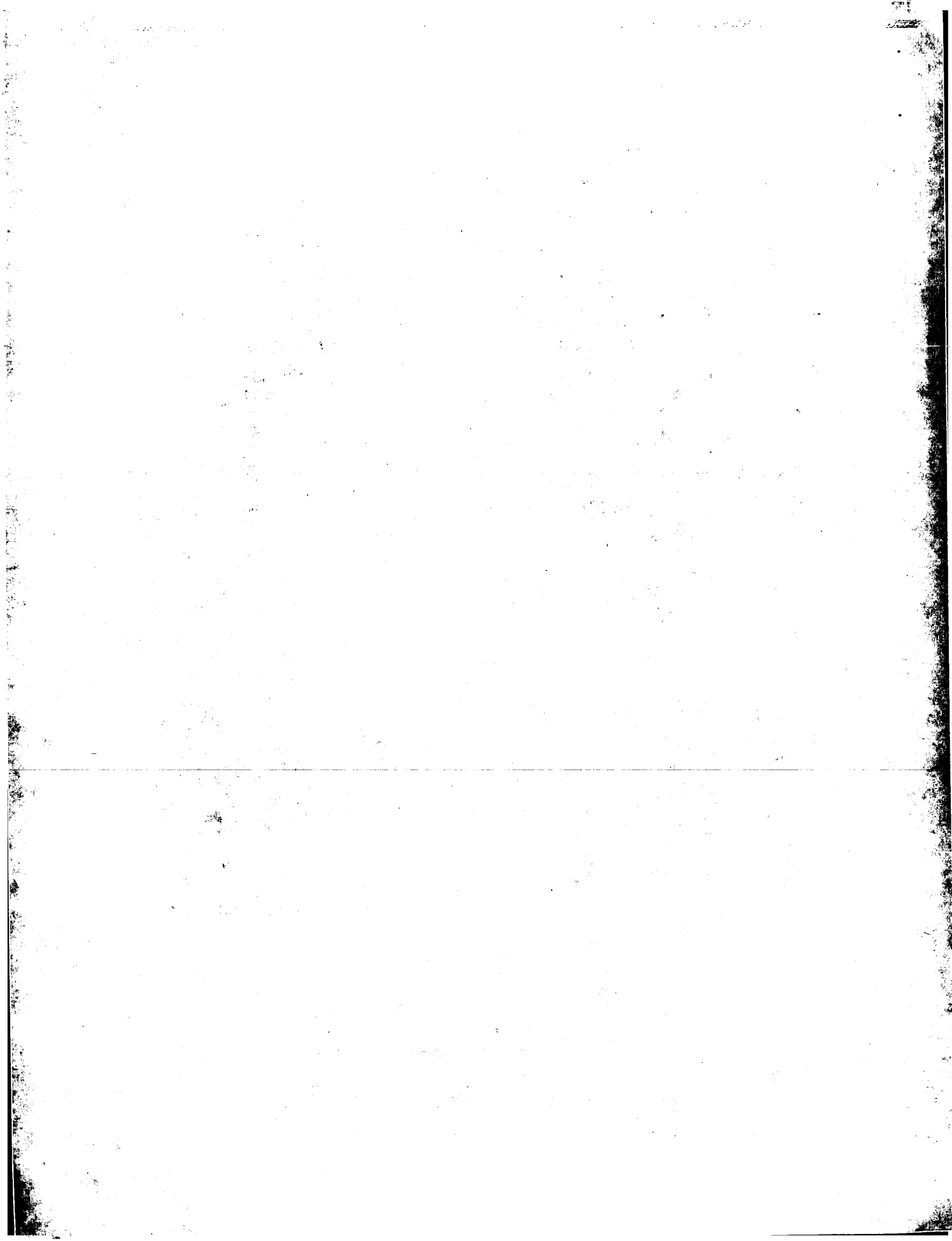
<400>2747

```

Met Trp Tyr Asn Asn Ser Ala Gly Pro Phe Leu Leu Thr Gly Phe Leu
 1          5          10          15
Gly Ser Glu Ala Val His Tyr Arg Ile Ser Met Ser Phe Phe Val Ile
          20          25          30
Tyr Phe Ser Val Leu Phe Gly Asn Gly Thr Leu Leu Val Leu Ile Trp
          35          40          45
Asn Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu
          50          55          60
Ala Asp Thr Asp Leu Gly Met Thr Phe Thr Thr Met Pro Thr Val Leu
65          70          75          80
Gly Val Leu Leu Leu Asp Gln Arg Glu Ile Ala His Ala Ala Cys Phe
          85          90          95
Thr Gln Ser Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Ile Leu

```


| | | | | | |
|---------|---|---------------------|-------------|-----|-----|
| | 100 | | 105 | | 110 |
| Leu Val | Leu Ala Tyr Asp Cys Phe | Ile Ala Ile Arg Thr | Pro Leu Arg | | |
| | 115 | 120 | 125 | | |
| Tyr Asn | Cys Ile Leu Thr Asn Ser Arg Val Met Asn | Ile Gly Leu Gly | | | |
| | 130 | 135 | 140 | | |
| Val Leu | Met Arg Gly Phe Met Ser Ile Leu Pro Ile | Ile Leu Ser Leu | | | |
| | 145 | 150 | 155 | 160 | |
| Tyr Cys | Tyr Pro Tyr Cys Gly Ser Arg Ala Leu Leu His Thr | Phe Cys | | | |
| | 165 | 170 | 175 | | |
| Leu His | Gln Asp Val Ile Lys Leu Ala Cys Ala Asp Ile Thr | Phe Asn | | | |
| | 180 | 185 | 190 | | |
| His Ile | Tyr Pro Ile Ile Gln Thr Ser Leu Thr Val Phe | Leu Asp Ala | | | |
| | 195 | 200 | 205 | | |
| Leu Ile | Ile Ile Phe Ser Tyr Ile Leu Ile Leu Lys Thr | Val Met Gly | | | |
| | 210 | 215 | 220 | | |
| Ile Ala | Ser Gly Gln Glu Glu Ala Lys Ser Leu Asn Thr | Cys Val Ser | | | |
| | 225 | 230 | 235 | 240 | |
| His Ile | Ser Cys Val Leu Val Phe His Ile Thr Val Met Gly | Leu Ser | | | |
| | 245 | 250 | 255 | | |
| Phe Ile | His Arg Phe Gly Lys His Ala Pro His Val Val Pro | Ile Thr | | | |
| | 260 | 265 | 270 | | |
| Met Ser | Tyr Val His Phe Leu Phe Pro Pro Phe Val Asn | Pro Ile Ile | | | |
| | 275 | 280 | 285 | | |
| Tyr Ser | Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Ile Arg | Leu Phe | | | |
| | 290 | 295 | 300 | | |
| Ser Gly | Gln Ser Arg Ala | | | | |
| 305 | 310 | | | | |



(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 April 2001 (19.04.2001)

PCT

(10) International Publication Number
WO 01/027158 A3

(51) International Patent Classification⁷: **C12N 15/12**,
C07K 14/705, C12N 5/10, G01N 33/50, C12Q 1/68

Street, 75751 Rishon LeZion (IL). **YANAI, Itai** [US/US];
55 Leicester Street, Brookline, MA 02146 (US).

(21) International Application Number: **PCT/US00/27582**

(74) Agents: **CERPA, Robert, K.** et al.; Morrison & Foerster
LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

(22) International Filing Date: **6 October 2000 (06.10.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
60/158,615 8 October 1999 (08.10.1999) **US**
60/184,809 24 February 2000 (24.02.2000) **US**

(71) Applicants (for all designated States except US): **DIGIS-
CENTS** [US/US]; Suite 720, 1814 Franklin Street, Oak-
land, CA 94612 (US). **YEDA RESEARCH AND DE-
VELOPMENT CO., LTD.** [IL/IL]; Weizmann Institute of
Science, P.O. Box 95, 76100 Rehovot (IL).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BELLENSON, Joel**
[US/US]; 244 Lakeside Drive, Apartment 15, Oakland,
CA 94612 (US). **SMITH, Dexter** [US/US]; 868 Trestle
Glen Road, Oakland, CA 94610 (US). **LANCET, Doron**
[IL/IL]; 15 Weizmann Street, 76280 Rehovot (IL). **GLUS-
MAN, Gustavo** [IL/IL]; 33/37 Ha'Alon Street, 79845
Bnei Ayish (IL). **FUCHS, Tania** [IL/IL]; 12 Harav neria

(88) Date of publication of the international search report:
26 September 2002

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **OLFACTORY RECEPTOR SEQUENCES**

(57) Abstract: The present invention provides polynucleotide sequences which encode polypeptides involved in olfactory sensation. The present invention also provides the polypeptides encoded by these polynucleotide sequences, vectors comprising these polynucleotide sequences and host cells transfected with these polynucleotide sequences. The present invention further provides for functional variants and homologues of these polynucleotide sequences and the polypeptides encoded by these polynucleotides. Libraries of polypeptides are also provided. Also included in the present invention is the use of these polypeptides and libraries of polypeptides in screening odorant molecules to determine the correspondence (scent representation, scent fingerprint or scent profile) between individual odorant receptors (the polypeptides) and particular odorant molecules. Also encompassed by the present invention is the use of the scent representation, scent fingerprint or scent profile to re-create and edit scents.

WO 01/027158 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/27582

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C12N5/10 G01N33/50 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, SEQUENCE SEARCH, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | WETZEL CHRISTIAN H ET AL: "Specificity and sensitivity of a human olfactory receptor functionally expressed in human embryonic kidney 293 cells and Xenopus laevis oocytes." JOURNAL OF NEUROSCIENCE, vol. 19, no. 17, pages 7426-7433, XP002178954 ISSN: 0270-6474 cited in the application the whole document | |
| A | WO 95 18140 A (YEDA RES & DEV ;RYCUS AVIGAIL (IL); BEN ARIE NISSIM (IL); LANCET D) 6 July 1995 (1995-07-06) pages 3,4,6; Figs 3 + 4 --- -/-- | |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "8" document member of the same patent family

Date of the actual completion of the international search

2 October 2001

Date of mailing of the international search report

15. 01. 02

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Holtorf, S

INTERNATIONAL SEARCH REPORT

In tional Application No
PCT/US 00/27582

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | <p>GLUSMAN GUSTAVO ET AL: "Sequence analysis in the olfactory receptor gene cluster on human chromosome 17: Recombinatorial events affecting receptor diversity." GENOMICS, vol. 37, no. 2, 1996, pages 147-160, XP002178955 ISSN: 0888-7543 the whole document</p> | |
| A | <p>& DATABASE EMBL SEQUENCE LIBRARY [Online] 22 July 1994 (1994-07-22) CROWE M.L., PERRY B.N., CONNERTON I.F.: "olfactory receptor; OR17-40 gene" abstract</p> | |
| A | <p>--- BUETTNER JILL A ET AL: "Organization and evolution of olfactory receptor genes on human chromosome 11." GENOMICS, vol. 53, no. 1, 1 October 1998 (1998-10-01), pages 56-68, XP002178956 ISSN: 0888-7543 the whole document</p> | |
| A | <p>--- TRASK B J ET AL: "Members of the olfactory receptor gene family are contained in large blocks of DNA duplicated polymorphically near the ends of human chromosomes" HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 7, no. 1, January 1998 (1998-01), pages 13-26, XP002135641 ISSN: 0964-6906 the whole document</p> | |
| A | <p>& DATABASE EMBL SEQUENCE LIBRARY [Online] 9 June 1996 (1996-06-09) TRASK, B.J., ET AL.: "Homo sapiens chromosome-19 36.3-kbp cosmid F7501, with 3 regions of similarity to olfactory receptor protein genes" accession no. L78442</p> | |
| A | <p>--- KRAUTWURST D ET AL: "Identification of ligands for olfactory receptors by functional expression of a receptor library" CELL, CELL PRESS, CAMBRIDGE, MA, US, vol. 95, 25 June 1998 (1998-06-25), pages 917-926, XP002153217 ISSN: 0092-8674 cited in the application</p> <p>---</p> | |

-/--

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/27582

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|--|-----------------------|
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A | WO 98 50081 A (ZHAO HAIQING ;FIRESTEIN STUART J (US)) 12 November 1998 (1998-11-12) cited in the application --- | |
| P,X | DATABASE EMBL SEQUENCE LIBRARY [Online] 14 June 2000 (2000-06-14) HEILIG R., ET AL.: "Human chromosome 14 DNA sequence BAC R-55G7 of library RPCI-11 from chromosome 14 of Homo sapiens (Human)" XP002178959 accession no. AL359218 --- | 1,4 |
| T | GLUSMAN GUSTAVO ET AL: "Sequence, structure, and evolution of a complete human olfactory receptor gene cluster." GENOMICS., vol. 63, no. 2, 15 January 2000 (2000-01-15), pages 227-245, XP002178957 ISSN: 0888-7543 the whole document --- | |
| T | FUCHS TANIA ET AL: "The human olfactory subgenome: From sequence to structure and evolution." HUMAN GENETICS, vol. 108, no. 1, January 2001 (2001-01), pages 1-13, XP002178958 ISSN: 0340-6717 ----- | |

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/27582

Box I Observations where certain claims were found uns archable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Claims 1-7, 15-19 partially.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claim : 1

Invention 1:

claims 1-7, 15-19 partially

Isolated nucleotide sequence encoding an olfactory receptor as characterized by SEQID1; the recombinant expression of the same in host cells; the translated polypeptide sequence of SEQID1 and a host cell and phage expressing said polypeptide; furthermore, a library of olfactory receptors suitable of determining the interaction pattern of a composition with said receptors comprising the translated expression products of at least two, 50, 100, 200 or 500 polynucleotides encoding olfactory receptors, one of which is characterized by SEQID1.

2. Claim : 2

Invention 2-115:

claims 1-7, 15-19 partially

As invention one but as characterized by SEQIDs 2-73 and 111-152.

3. Claim : 3

Invention 116-1047:

claims 8-10 and 15-19 partially, 31,32,33 completely

Isolated nucleotide sequence encoding an olfactory receptor as characterized by one of the SEQIDs from the group of SEQID153 to SEQID1084; the recombinant expression of the same in a host cell; furthermore, a library of olfactory receptors suitable of determining the interaction pattern of a composition with said receptors comprising the translated expression products of at least two, 50, 100, 200 or 500 polynucleotides encoding olfactory receptors, one of which is characterized by one of the SEQIDs from the group of SEQID153 to SEQID1084; furthermore, a DNA array or a DNA chip comprising a DNA segment derived from one SEQID of the group of SEID153 to SEQID1084, a method determining the differences among individuals with respect to their olfactory faculties,

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

comprising comparing the olfactory DNA of the individual against said DNA array or chip; method to determine a single nucleotide polymorphism in olfactory receptors based on primers designed according to the first and last 25 bases of one of the SEQIDs of the group of SEQID153 to SEQID1084.

4. Claim : 4

Invention 1048-1971:

claims 11-14,20-24,25-30 partially

Isolated olfactory receptor polypeptide
as characterized by one of the SEQIDs from the group of
SEQID1085 to SEQID2008; a recombinant host cell or phage
expressing said polypeptide;
furthermore, a library of olfactory receptors suitable of
determining the interaction pattern of a composition with
said receptors comprising at least two, 50, 100, 200 or 500
olfactory receptor polypeptides, one of which is
characterized by one of the SEQIDs from the group of
SEQID1085 to SEQID2008;
furthermore, a method for determining the binding pattern of
a composition with olfactory receptors, comprising exposing
said library to a composition, further determining whether
the receptor is activated.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/27582

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| WO 9518140 | A | 06-07-1995 | WO 9518140 A1 | 06-07-1995 |
| WO 9850081 | A | 12-11-1998 | US 5993778 A | 30-11-1999 |
| | | | AU 7372898 A | 27-11-1998 |
| | | | EP 0983506 A2 | 08-03-2000 |
| | | | US 6218358 B1 | 17-04-2001 |
| | | | WO 9850081 A2 | 12-11-1998 |

Form PCT/SA/210 (patent family annex) (July 1992)